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LOW ALTITUDE TEMPERATURE AND HUMIDITY PROFILE DATA FOR APPLICATION TO AIRCRAFT NOISE PROPAGATION

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# LOW ALTITUDE TEMPERATURE AND HUMIDITY PROFILE DATA FOR APPLICATION TO AIRCRAFT NOISE PROPAGATION

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#### SUMMARY

A data search of the weather statistics from 11 widely dispersed geographical locations within the continental United States has been conducted. The sites, located along both seacoasts and in the interior, span the northern, southern, and middle latitudes. The weather statistics, retrieved from the records of these 11 sites, consist of two daily observations taken over a 10-year period. The data were sorted with respect to precipitation and surface winds and classified into temperature intervals of 5° C and relative humidity intervals of 10 percent for the lower 1400 meters of the atmosphere. These data were assembled in a statistical format and further classified into altitude increments of 200 meters. The data are presented as sets of tables for each site by season of the year and include both daily observations.

#### INTRODUCTION

Both the accuracy and repeatability of aircraft flyover noise measurements and the prediction of aircraft noise contours are strongly influenced by the composition of the lower atmosphere which lies over the flyover acoustic range. These components include small-scale turbulence, wind shears, and the temperature and humidity gradients from the surface of the Earth to an altitude of approximately 1400 meters (refs. 1 to 10). This portion of the atmosphere is the propagation medium of aircraft noise which affects people on the ground.

In selection of an acoustic range for flyover noise measurements the location and time have generally been determined by other than weather factors, such as test airplane availability coinciding with the availability of the airport and adequate support facilities. Other test plan variables such as ambient noise levels, unpredictable weather conditions, and logistic support are then factored into the planning cycle. Extra test days are usually added intuitively to compensate for expected lost time. Except for the weather, the other

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factors are controllable to some degree. The weather factor was the reason behind this data search, which was an effort to develop planning information for site selection for flyover noise tests when several combinations of temperature and humidity are of interest to the researcher. The purpose of this work, therefore, is to reduce the uncertainty in selecting test sites for a desired set of weather variables.

The data retrieval and subsequent interpretation with respect to meteorological factors were conducted by staff meterorologists with the National Oceanic and Atmospheric Administration (NOAA) at the National Climatic Center (NCC), Asheville, North Carolina. The selection of data applicable to aircraft operations, especially flyover noise measurements, was made by staff members at NASA Langley Research Center. Climatological data are generally analyzed on a large scale by meteorologists and climatologists who have requirements for the weather data and who also acquire the data in the format they prefer. Presentation of existing weather data in altitude increments of 200 meters for this report, therefore, required a special effort from the NCC staff to adapt the data search to their computerized data handling routines. These data are thus somewhat unique because of their low altitude and fine detail presentation, their widely dispersed geographical locations, and the sorting criteria for inclusion of data in the tables (e.g., surface winds below 10 knots, precipitation, and inversions based below an altitude of 1400 meters).

The results of this study are presented as sets of tables showing the frequency of occurrence of temperature and relative humidity combinations at eight atmospheric levels between the surface and 1400 meters and for the daily observations at 0000 and 1200 Greenwich mean time (GMT). The data are sorted by observations of precipitation, surface winds equal to or less than 10 knots, and inversions based below 1400 meters. They are classified into four seasons for each of the 11 sites.

#### **PROCEDURE**

#### Geographical Locations

The selection of geographical locations was based upon identifying locations which generally experienced significantly different seasonal mean temperature and relative humidity combinations. Temperature and humidity variations among sites during a given season are occasionally desired for acoustic testing when a wide range of atmospheric conditions are required. Other factors were variations in local climatology to the extent that several combinations of test conditions might be obtainable at one locale, which would minimize the number of relocations during testing and 10 years of continuous two-a-day observations as a condition for establishing statistical significance. Limiting the selection to the continental United States was arbitrary but was done primarily for logistic reasons.

Eleven locations which met these requirements were selected for purposes of data summarization and are shown in figure 1 with the periods of record. The sites were located along both seacoasts and in the interior United States and extended across the northern, southern, and middle latitudes.

#### Data Retrieval and Classification

The temperature and relative humidity data for the selected observations included in the tables of this report were based upon examination of radiosonde observations taken from National Climatic Center Card Decks 545 and 645 and Air Force Tape Data Family 54 (TDF54).

The selection of observations for inclusion in the tables was based upon a visual examination of radiosonde observations as plotted on form WBAN-31A. Figure 2 shows an observation plotted on this form. This observation is typical of the approximately 80 000 sounding plots examined by the NCC staff to compile the data for this report. The surface weather conditions are noted on the form at the time of the sounding; that is, the observer records wind speed and direction, precipitation, cloud cover, temperature, relative humidity, and barometric pressure. Temperature inversions based below 1400 meters were also read directly from these plotted forms. The data are reduced and recorded in the table at the upper right of the figure. In the example plot shown in figure 2, the temperature change from the surface (124 meters m.s.l.) to 390 meters m.s.l. exhibits a lapse rate slightly greater than the average lapse rate for the United States (7.2° C/km), as shown in figure 2.3 of reference 11. The lapse is followed by a strong temperature inversion up to 1380 meters, where the temperature has increased from 16.6° C to 26.4° C. Average lapse rate is used for comparison in this case because it is the more typical situation. (See fig. 2.3 in ref. 11.) The average lapse rate is approximately 6° C/km, as compared with the dry adiabatic lapse rate of 9.8° C/km which is the highest rate of cooling with altitude that occurs if no heat is exchanged in the process (ref. 12).

The 0000 GMT and 1200 GMT radiosonde observations for 10 years were scanned for each station and a code was assigned to each observation. The code criteria are as follows:

Code	Description
1	Precipitation with surface wind speed $\leq 10$ knots at observation time
2	Surface wind speed > 10 knots with no precipitation at observation time
3	Precipitation with surface wind speed > 10 knots at observation time

Code	Description
4	Inversion based below 1400 meters with no precipitation and surface wind speed ≤ 10 knots at observation time
9	Missing or rejected observation
В	None of the above

One should note that code B, conveniently designated as "None of the above," indicates that these are conditions where the temperature inversions were either based above 1400 meters or may not have existed at all and that there was neither precipitation nor surface winds greater than 10 knots at the time of observation.

The data for the 200-meter increments were obtained by interpolation. Interpolation was done by using data given for the standard pressure levels. The standard pressure levels are the surface, 1000 mbar, 950 mbar, 900 mbar, 850 mbar, 800 mbar, etc. The surface temperature and relative humidity were available directly from the card decks and taped data without interpolation.

#### Data Analysis

Observations coded with a 4 or a B were used to set up the data with temperature and relative humidity as the variables. Tables were formed for eight levels — surface, 200 meters, 400 meters, 600 meters, 800 meters, 1000 meters, 1200 meters, and 1400 meters. The heights are given as distances above the surface.

The tables show the frequency of occurrence of temperature and relative humidity combinations. For temperature the class interval is 5°C; for relative humidity the interval is 10 percent. Relative humidities of 100 percent are treated in one class.

In addition to the formation of the tables, frequencies of occurrence of the different codes were computed. These are given at the bottom of each table. They permit a subjective assessment of the probability of encountering weather restrictions. Other information given includes the station elevation in meters, latitude and longitude in degrees and minutes, and the period of record for the data used in each table.

Tables are provided for each of the four seasons for the 0000 GMT and 1200 GMT observations. For purposes of this report, the seasons are defined as follows:

Season	Months
Winter	December, January, and February
Spring	March, April, and May
Summer	June, July, and August
Fall	September, October, and November

#### RESULTS AND DISCUSSION

The results of this report are a set of tables providing the frequency distribution in the lower atmosphere of temperature and relative humidity combinations classified by location, season of the year, time of day, and altitude. The discussion will describe the data available in the individual tables, as well as data collected together from all the tables in a summary format to provide an overview of the tabular contents. The following discussion, therefore, will be limited to a descriptive example of the tables and how to extract data from a table of particular interest without interpretation.

#### Summary Data

Because of the large quantity of data contained in the 44 pairs of tables and seven classification codes, summary data for clear days and inversions are provided in tables I and II, respectively, which, it is believed, will be most useful for low altitude flight test planning purposes.

Clear days. - Table I provides a simplified summary of the number of clear days observed at the time of the sounding and the number of total observations at each of the 11 sites. Clear days in this context means no precipitation and surface winds  $\leq$  10 knots at the time of observation. By this definition, clear days are the sum of all observations encoded 4 and B according to the criteria described in the procedures section. The order of presentation among the sites is by grouping along the east coast, in the midcontinent, and along the west coast. The complete tables of each site, enumerated III to XIII, are indexed in tables I and II

Examining the data for Norfolk, Virginia, in table I the total number of clear days for the 10-year period was 4434 of 7305 observations or approximately 61 percent. (Note that these numbers represent all the daily observations for all four seasons for the 10-year period.) The data for the summer season show that there were 1334 clear days of 1839 or approximately 73 percent. The summaries indicate, therefore, that the summer season would provide the most opportunities for low altitude flight tests at Norfolk by the clear day criterion. Should there be other criteria more demanding than simply the clear day, then the reader must examine table IV(c) (Norfolk, summer season) for a more detailed assessment of the data.

Similar information is available for the other sites. Should low temperatures be of interest, clear days in winter at the northern latitude sites would be encountered at Glasgow, Montana, approximately 63 percent of the time compared with only 22 percent at Tatoosh Island, Washington. The most probable range of temperatures, however, must be determined by examining the particular table for the site of interest.

Inversions. - Since a normal temperature lapse with altitude is a cooling phenomenon, an increase in temperature with altitude is known as an inversion. The effects of inversions on ground noise measurements from overflying airplanes are currently not well known, and some investigators have argued that inversions are insignificant (ref. 13). But variances among flyover noise measurements when all other parameters are repeatable suggest a possible relationship between inversions and noise data scatter (refs. 1 and 14).

For flyover noise planning purposes for which it would be desirable to estimate the probable occurrence of either inversions or clear days without inversions, inversion occurrence and subsequent lifting can be deduced from the observation data of these tables. Reference 15 discusses inversion frequency from the meteorological and climatological standpoint.

The conditions identified in the data as code B are reproduced in summary table II. The number of clear days indicated by these data is considerably reduced from the numbers indicated in table I. Referring to figure 3, at the bottom of the page for the 1200 GMT data, there were 445 clear day observations (code 4) indicating inversions below 1400 meters and there were 243 days (code B) with no inversions below 1400 meters. Twelve hours later at 0000 GMT, the number of clear days with inversions based below 1400 meters had diminished to 158 (code 4), and the number with no inversions below 1400 meters (code B) had increased to 488. The data indicate that the inversions had lifted during the day, a natural, normally expected occurrence. These data further indicate the normal occurrence of inversion lifting during the 12-hour period from 1200 to 0000 GMT in all but one case - Oakland, summer - where the number under code B was greater at 0000 GMT than at 1200 GMT. Also, the data for Norfolk, Caribou, Glasgow, and Green Bay indicated fairly large increases in code B observations (i.e., lifting of inversions between the morning and evening observations) during the summer season but very little change during winter. Oakland and San Diego, however, were just the opposite. At those sites, the largest changes occurred during the winter season and there was essentially no lifting of inversions during the summer.

#### Detailed Data Tables

The detailed tables contain a large amount of information for the user. Table IV(c) (Norfolk, Virginia, summer) was chosen as a typical example and is reproduced herein as figure 3 with leaders to several features to identify the significant items provided.

<u>Locale.</u>- The geographic coordinates of the location and the elevation are shown at the top right of each table, and the period of observation is shown at the top left.

Seasons. - There are eight tables for each geographic location, and these are presented in four pairs, one pair per season ((a) winter, (b) spring, (c) summer, and (d) fall). Of each tabular pair, the table on the left side presents data for the observations at 0000 hours GMT, and the table on the right side presents data for observations at 1200 hours GMT. The season and time of observation are printed at both the top and the bottom of each table.

Temperature and humidity as a function of altitude. The body of the table is divided into altitude levels which are further subdivided into cells containing the number of observations for discrete class combinations of temperature and relative humidity. The sum of all these cell combinations at each altitude level is equal to the total number of accepted observations and is indicated at the lower right corner of each altitude interval. This quantity is equal to the sum of code 4 and code B observations given at the bottom of the table. (Notice that the sum of the rejected observations plus the sum of the analyzed observations is equal to the total number indicated at the very bottom of the table.)

Observation totals. - The setup of this tabular format was to provide a ready reference to the total number of observations such that the reader could readily compare any quantity in the table with the total number of observations to make his own probability estimates.

The example table (fig. 3) shows that at Norfolk, Virginia, for the period August 1955 through July 1965, there were 919 observations at 1200 hours GMT during the 3-month summer season. There were 48 observations of precipitation (28 of code 1 and 20 of code 3) or approximately 5.2 percent of the total observations. There were 198 observations where surface winds exceeded 10 knots (178 of code 2 and 20 of code 3) or approximately 21.5 percent. The remaining number of days (688 days or approximately 74.5 percent) are those which would be classified as clear days (codes 4 and B) and satisfactory for low altitude flight testing provided that the temperature and relative humidity requirements are also satisfied. Five of the possible 919 observations or less than 1 percent were either missing or judged to be unusable (code 9). Thus, the data should be statistically significant for that 10-year period.

The body of the tables was formatted for a statistical treatment of two variables permitting the user to readily calculate a mean and variance of the temperature and relative humidity for a given altitude level. However, such statistical calculations should be interpreted very carefully considering the fact that although the relative humidity classes are divided uniformly into 10 percent intervals for statistical format convenience, atmospheric absorption of moisture as a function of temperature is a logarithmic phenomenon.

#### CONCLUDING REMARKS

Weather statistics from 10 years of two daily observations have been collected from 11 geographical locations widely dispersed throughout the continental United States. The statistics are presented in tabular format for the lower 1400 meters of the atmosphere to assist in low altitude research flight test planning and noise contour prediction.

Langley Research Center,
National Aeronautics and Space Administration,
Hampton, Va., May 30, 1975.

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TABLE I.- SUMMARY OF RESULTS FROM ALL OBSERVATIONS FOR 10 YEARS FOR ALL LOCATIONS BY SEASONAL VARIATION
INDICATING THE NUMBER OF OBSERVED SATISFACTORY TEST DAYS

			Combined			Winter			Spring			Summer		Fall			
Table	Location of observations	Total	Clear days <sup>a</sup>	Percent	Total	Clear daysa	Percent										
ш	Miami, Fla.	7306	5861	80	1806	1482	82	1840	1357	74	1840	1537	84	1820	1485	82	
IV	Norfolk, Va.	7305	4434	61	1806	957	53	1840	982	53	1839	1334	73	1820	1161	64	
v	Caribou, Maine	7306	4251	58	1806	875	48	1840	974	53	1840	1256	68	1820	1146	63	
VI	Glasgow, Mont.	7306	4359	60	1806	1135	63	1840	978	53	1840	1114	61	1820	1132	62	
VΠ	Green Bay, Wis.	7307	5032	69	1807	1099	61	1840	1156	63	1840	1454	79	1820	1323	73	
VIII	Columbia, Mo.	7306	5025	69	1806	1106	61	1840	1011	55	1840	1534	83	1820	1374	75	
IX	San Antonio, Tex.	7306	5240	72	1806	1261	70	1840	1138	62	1840	1392	76	1820	1449	80	
x	Denver, Colo.	7306	5330	72	1806	1326	73	1840	1197	65	1840	1362	74	1820	1445	79	
ХІ	San Diego, Calif.	7306	6459	88	1806	1604	89	1840	1533	83	1840	1691	92	1820	1631	90	
XII	Oakland, Calif.	7306	4773	65	1806	1418	79	1840	1011	55	1840	1046	. 57	1820	1298	71	
XIII	Tatoosh Island, Wash.	7305	2687	37	1806	387	21	1840	720	39	1840	982	53	1819	598	33	

<sup>&</sup>lt;sup>a</sup>The sum of all observations coded 4 and B as defined in the section "Procedures."

TABLE II.- SUMMARY OF CLEAR DAYS AND NO INVERSIONS BASED BELOW 1400 METERS (CODE b) FOR THE ELEVEN SITES

	Wir	iter	Spi	ring	Sum	mer	Fall				
Locations		e of ons, GMT		ne of ions, GMT		ne of ons, GMT	Time of observations, GM7				
	00	12	00	12	00	12	00	12			
Miami	455	119	398	207	543	272	548	181			
Norfolk	71	35	<b>2</b> 55	100	488	243	211	104			
Caribou	34	25	<b>2</b> 53	90	463	159	153	78			
Glasgow	57	9	<b>2</b> 59	57	418	55	<b>2</b> 76	36			
Green Bay	79	31	277	74	5 <b>21</b>	8 <b>2</b>	274	106			
Columbia	103	18	<b>2</b> 63	53	609	82	379	61			
San Antonio	214	48	316	109	535	303	456	197			
Denver	<b>22</b> 8	25	392	54	480	45	439	36			
San Diego	323	51	164	103	22	15	129	44			
Oakland	243	117	139	140	13	17	18 <b>2</b>	60			
Tatoosh Island	123	88	203	175	177	138	153	116			

TABLE III. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE
HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION
TIME FOR MIAMI, FLORIDA

## (a) Winter

PERIOD	JAN 1959-	)EC 1	968																		ELV		и э	<b>.</b>	. 00	
	WINTER (D.										: (GMT	·):	00 HR	SEASON:	WINTER (DJ	F)					CLV	: 4		5 48N		12 HR
ABV SFC (METERS:	E AIR TEMP	. 00	10	20	1 V E	40	50		70	80	90 1		TOTAL DBS	ALTITUDE ABV SFC	AIR TEMP INTERVAL	RE	L /		1 V E	40	1 U 1	4 1 D	ITY	Y		TOTAL
0		. 09	19	29	39	49		69	79	89	99			(METERS)	(C)	09	19	29	39	49	59	69		89 9		
U	5/ 9 10/ 14	,		1		.7	7	2	4	_			1 37	0	0/ 4 5/ 9						1	4	2 28 2		2 1	14 70
	15/ 19 20/ 29	•			7	29 10		124		7 104	12		162 470		10/ 14 15/ 19					1	1	12 10	22 8	82 54 77 11		175
	25/ 29 TOTAL			ì	24	46	101	7 182	219	8 119	16		38 708		20/ 24					1	3	20		92 10		256
200	5/ 9 10/ 14	•		1	1 19	2 16	2 9	11	3				59	200	TUTAL 0/ 4			1		2	9	53 <u>1</u>		80 28	5 3 U	774
	15/ 19 20/ 24			3	В	24	66 26	62 98	165	9 118	3 5		221 417		5/ 9 10/ 14			i	-	5	6	11			2	47
	25/ 29 TOTAL	•		4	28		1	174	1		В		708		15/ 19		1		3	6	10 30		75 5	57 30		103 260
400	0/ 4			1	5	4	1	177	1	12,			1 15	4.00	20/ 24 TOTAL		1	2	3	21		129 2	09 14	28 87		353 774
	10/ 14 15/ 19			2	14	15	27	20 118	13		,		91	400	0/ 4 5/ 9			1	3 1	7	11	1 12		1 5 a	2	10 50
	20/ 24 TOTAL			,		1	4	55	120	88	7		326 275		10/ 14 15/ 19		1	1	3	7 10	22		36 1 41 10	1/ 4		119 395
600	0/ 4			3	28	34	72 1		234	131	13		708 2		20/ 24 TJTAL		1	2	11	26	59		57 11	13 20	0	200 774
	5/ 9 10/ 14		1	1	11	7 21	2 2	5 40	36	10			26 142	600	0/ 4 5/ 9		2	1 5	2	4	1	2	ì	6 2	,	5 5 3
	15/ 19 20/ 24		1	2	3 1	5 1	23 11	26	49	104 34	28 4		411		10/ 14 15/ 19		2	5	6	10	12	43		21 4		162
800	TOTAL 0/ 4		2	7 1	2 1	34 1	61	160	242	149	32		708 2		20/ 24 TOTAL		6	16	17	25	4		18 2	5 3	3	60
	5/ 9 10/ 14		1	5 8	11	7 21	5 22	8 41	8 78	3 24	3		47 207	800	0/ 4		_	2	2				1	1		774 6
	15/ 19 20/ 24		ī	1	4	7	22		152	122	21		422		10/ 14 15/ 19		2	5	11	16	34	41	79 3	5 1	7	231
1000	707AL 0/ 4		2 1	16	24	37		148		156	24		708		20/ 24		-	•		11	25	2		5	-	457 16
	5/ 9 10/ 14		7	12	9 5	8 13	15	15 39	17 103	8 69	1 16		80	1000	7DTAL 0/ 4		1	19	31	32	2	114 2	59 19 3	18 49 1		774 8
	15/ 19		5	7	3 1	16	26	64	99	87	32	1	276 340		5/ 9 10/ 14		7	14	18	13	8 20		21 1 82 8			87 316
1200	TOTAL 0/ 4		17	31	18	38	49	122		164	49	1	7 708		15/ 19 20/ 24		7	12	10	16	20		06 10	1 29		362 1
1200	5/ 9 10/ 14		10	10	13	9	11	14	25	14	3		109	1200	73TAL 0/ 4		24	43	35 1	3 Z 2	50 1	110 2		5 61	. 1	774 8
	15/ 19		10	12	B 5	19	23 42	65 51	87 68	77 56	27 14	1	329 262		5/ 9 10/ 14		12	18	10	6 15	14 46		23 2 10 8			125 394
1400	TOTAL -5/ -1 0/ 4		28	27	28	44	76	131	ī	148	44	1	70B 1		15/ 19 TOTAL		13 38	40	9 37	15 38	2 2 8 3		70 5 05 15			247 774
	5/ 9		15	3 18	14	14	8	11	3 25	3 32	1 10		11	1400	0/ 4 5/ 9		1 16	1 24	1 18	114	6			1 1		10 155
	10/ 14 15/ 19		15 4	23	18	36 21	31 29	57 27	97 29	8 B 2 4	32 4		397 152		10/ 14 15/ 19		23 B	32	30 15	35 17	45 19	71	9 9 23 1	9 37		465
	TOTAL		35	47	43	71	68	95		147	47		708		TOTAL		4 B	60	64	67		123 1				774
ABV SFC	AIR TEMP INTERVAL	00	10 19	20 29	30 39	40 49	50 59	60 69	70 79	80 89	90 10 99	00 1	OFAL	ALTITUDE ABV SFC	AIR TEMP Interval	00	10	20 29	30 39	40 49	50 59		70 B			TOTAL
(METERS)	(C) Winter (DJ		LΛ	T I	VΕ	н	UM	I D			(%)			(METERS)	(C) WINTER (DJF	RΕ			V E			I D	ĮTY		(%)	OBS
													- '''	35-30M1	THIER IUJE	•							111	ME (G	MT) t	12 HR
	FREQUE	2	F WE.		R (C)	DDE )	FOR 9	₩IN B		00 HI					FREQUEN	ICY OF	WE 3		R (C)	10E1	FOR 9	WINT		HR [AL		
	31	139	13	25	1		12	455		90	3				31	81	12	65	5		5	119		903		

## TABLE III. - Continued

# (b) Spring

PER 100:	JAN 1959-DE	1968																ELV	: 41	1 25	48N2	80 44 W
	SPRING (MAM AIR TEMP INTERVAL (C)	REL 00 10 09 19	0 20		E 1 40 49			I T 70 79	7 I ME Y 80 89	(%)	OO HR TOTAL O DBS		SPRING (MAI E AIR TEMP INTERVAL		0 20	30	40			11 T Y 7 1 7 7 7 7 9 8 9 8 9	90 10	): 12 HR ) TOTAL 00 DBS
0	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34		1	2	6 20 8	9 45 44 1	122		3 30 26	19	1 25 218 318 3	0	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24				2 1	1 5 9	14	2 6 18 17 33 54	13 71	1 10 53 4 182 11 492
200	TOTAL 10/ 14 15/ 19 20/ 24 25/ 29		1	2 3 4	34 1 7 18	18	4 B	3 130 48	59 72 10	6	565 6 39 392 128	200	25/ 29 TOTAL 5/ 9 10/ 14 15/ 19	:	ı 1	3	9	15 5 17	3 ; 5 / 16 3 13 45 3	9 25 2 265 3 4 7 30	275	54 15 792 7 31 151
400	707AL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		1	1	30 4 11 14 2	5 15	175 4 34 116	15	12 93	2 11	565 1 13 93 429 29	400	20/ 24 25/ 29 TOTAL 5/ 9 10/ 14 15/ 19	1	1	4	1 13 4 3	1 8	3 1 132 24 1 6 1	8 269 3 1 1 1	63 1 76	1 577 26 1 792 10 32
600	TOTAL 5/ 9 10/ 14 15/ 19 20/ 24	1	2	10 1 3 6	31 4 14 24		163 1	1 3 62	51 67	13 1 11 16	565 2 25 212 322	600	20/ 24 25/ 29 TOTAL 0/ 4 5/ 9	1 1 1 2	. 2		9 3 19		44 15 120 25	1	14 54 69	1 267 1 482 1 2 792 2
800	25/ 29 TOTAL 5/ 9 10/ 14 15/ 19	1	4	10 1 1 5	1 43 1 6 20	2	1 119 9	71 1 2 16	18	28	565 5 42 295	600	10/ 14 15/ 19 20/ 24 TOTAL 0/ 4	2 4 1 10	1 2 2	2 5 10	6 7 12 25	1 6 22 13 42	13 1 70 12 28 9 114 23	1 149	2 52 33 87	9 56 429 296 792
1000	20/ 24 TDTAL 0/ 4 5/ 9 10/ 14	1 2 1 2	4	7 14 1 2	15 42 1	31 82 2 7	123 1	.78 3	25 94 4 19	9 26 5 1	223 565 1 15 85		5/ 9 10/ 14 15/ 19 20/ 24 TOTAL	3 2 3	1	1 6 1	2 8 12 8 30	11 51 13		1 2 3 14 3 155 8 36	4 41 8 53	14 102 523 152 792
1200	15/ 19 20/ 24 TOTAL 0/ 4 5/ 9	3 1 7	6	14 4 21 1 2	17 18 47	40 16 65	75 34	97 22	5	31 1 1 37 2	107	1000	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	4 4 5	1 4 11 4	7 21	1 4 30 10	1 9 46 8	2 30 5	1 1 9 4 3 39 3 143	16 38	22 22 171 548 49
1400	10/ 14 15/ 19 20/ 24 TOTAL 0/ 4	2 8 1 12	6	7 10 20	12 34 9 58	14 58 2 76		94		8 24 1 32 1	26	1200	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19	14 3 8 7	20 2 6 13	29 1 8 27	45 2 13 39	6 24	147 22: 2 7 1: 47 5: 100 13:	1 6 3 51	55 1 17 15	792 2 39 232 506
	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL	1 6 8 15	5 14 22 41	2 10 27 39	15 36 1 52	5 20 49 74		74	54	2 17 14 3	32 181 349 1 565	1400	20/ 24 TUTAL 0/ 4 5/ 9 10/ 14	1 19 3 14	3 24 4 11	2 38 8 28	58 1 2 35	ì	156 203 1 9 12 55 72	153 2 15	33 3 22	13 792 4 62 323
ABV SFC (METERS)	INTERVAL (	00 10 09 19 REL		30 39 V E	40 49 H	50 59 U M		79 I T	89 Y	90 100 99 (%) (GMT):	OBS	ALTITUDE	15/ 19 20/ 24 TOTAL AIR TEMP	10 1 28 00 10	25 3 43 20	34 1 71 30	47 85 40	91 1 50	75 87 140 171 60 70	129		398 5 792 7 Total
	FREQUENCY 1	2 2	3	4	10E)	9	В		DTAL			ABV SFC (METERS) SEASON: S	(C) PRING (MAM)					UM	69 79 I D I	TY	99 (%) (GMT):	OBS 12 HR
	23 31	16 14	4 10	67		2	398		920				FREQUENC 1	2 :	3	4	DDE)	FOR 9	SPRING B	-12 H		
													27	93 5	5 5 8	5		3	207	921	)	

## TABLE III. - Continued

## (c) Summer

PERIOD: .	JAN 1959-DE	C 19	68																		ELV:		М	25 4	8N. 6	U 44	4 W
SEASONI S ALTITUDE ABV SFC (METERS)	SUMMER (JJA AIR TEMP INTERVAL (C)		L 10 19	A T 20 29	I V E 30 39	40 49	50 59		70 79	T Y 80		4T): (%) 100	OO HR TOTAL OBS	SEASONI ALTITUDE ABV SFC (METERS)	INTERVAL		L A 10 19	7 I 20 29	V E 30 39	н 40 49	U N 50 59	1 1 60 69	70 79		(GMT) (%) 90 10 99	Т(	2 HR DTAL DBS
0	20/ 24							154	5	17 95	13		35 539	0	20/ 24 25/ 29							2	. 4	65		. +	291 565
	25/ 29 30/ 34					i	23	69	14	-	-		107		TOTAL							5	117	312 377	338	9	856
200	TOTAL 20/ 24					2	31	223	294	112	19		681 39	200	20/ 24 25/ <b>29</b>						1		283	96 337	32 49		174 682
200	25/ 29					1	12	165			ī		641		TOTAL						î			433	81		856
	30/ 34							1	201	00			1 1	400	20/ 24									325	70		613
400	TOTAL 20/ 24					1	12	167	106	99 84	6 7		681 210		25/ 29 Total									109	74		243 856
	25/ 29					-		112	272		1		471	600	15/ 19								2	1	1		- 4
600	TOTAL 20/ 24					1	11	124		217	8 35		681 604		20/ 24 25/ 29						1	49	289	368	130	1	843 9
000	25/ 29					í	10	36	23	7			77		TOTAL						7	51	296	370	131	1	856
800	TOTAL 15/ 19					4	18	105	295	224	35 3		681 9	800	15/ 19 20/ 24						13	79	364	9 323	1 54		23 833
• • • • • • • • • • • • • • • • • • • •	20/ 24					6	33			159	14		671		TOTAL						13			332	55		856
	25/ 29 TOTAL						1	1/0	71/	162	17		681	1000	15/ 19 20/ 24					6	5	114		66	22 35		164
1000	15/ 19					٠	34	- 6	20		ii		65		TOTAL				i	5		131			57		856
	20/ 24				4	14		169			16		616	1200	15/ 19				3	3				164	31		607
1200	TOTAL 15/ 19				1	14	15		113	141 77	27 19	1	681 285		20/ 24 TOTAL				3	11				29 193	3 Ž		249 856
	20/ 24				5	26	ВО	123	122	36	4		396	1400	10/ 14								2				2
1400	TOTAL 15/ 19				6	31 25				113	23	1	681 598		15/ 19 20/ 24			3	2	24	74	225	318	158	21		82 <b>8</b> 26
	20/ 24			1	6	16	30	22	7	1		•	83		TOTAL			3	7	33	81			158	21		856
	TOTAL			1	9	41	103	176	227	102	21	1	681	ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90 10	a Ti	OTA:
ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80		100	TOTAL	ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	(	OBS
	INTERVAL	09	19	. 29	39	49	59	69	79	89	99		OBS	(METERS)			LA	TI	V E	н	U	1 1	1 0		(%) (GMT)		3
(METERS) SEASON:	C) SUMMER (JJA			Δ 1	I V E	. '	, ,	4 [	J 1			(%) HT):	00 HR	2F # 2 () M 1	SUMMER (114	•								. Inf	. vomi		- HK
															FREQUEN	CY n	F WE	ATHE	R (C	DDE	FOR	t SU	MER.	-12 F	IR.		
	FREQUEN					ODE									1	2	3		4		9			TOTA			
	1	2		3	4		9		3	TOTA					33	21	7	7 5	84		3	272	2	92	0		
	82	143	1	2 1	38		1	54	2	92	O.																

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# TABLE III. - Concluded

# (d) Fall

PERIOD: JAN 1959-DEC 1968	ELV: 4 M 25 48N, 80 44 W
SEASON: FALL (SQN)  ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 0BS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASON: FALL (50N)  ALTITUDE AIR TEMP R E L A T I V E H U H I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99
0 10/14 1 1 2 2 1 15/19 1 3 7 5 2 2 1 21 21 20/24 3 27 54 54 27 14 179 25/29 3 21 117 222 99 11 473 30/34 6 5 2 2 2 1 13	0 5/ 9 1 1 2 3 7 10/ 14 4 2 9 11 26 15/ 19 4 9 52 54 0 125 20/ 24 1 10 29 128 250 20 438 25/ 29 2 26 115 58 201 TOTAL 2 21 68 307 373 20 797
TOTAL 2 10 61 181 280 128 26 688 200 10/14 1 2 1 1 5 15/19 3 1 8 7 3 4 2 28 20/24 5 32 83 107 53 4 28 25/29 1 3 5 64 218 74 6 371 107AL 5 11 45 155 329 131 12 688	TOTAL 2 21 68 307 373 26 797 200 5/9 2 1 1 4 15 15/19 1 5 8 19 23 9 65 20/24 3 15 49 131 174 78 450 25/29 8 86 129 40 263
400 10/14 1 2 1 2 1 2 1 2 9 15/19 3 4 6 27 7 3 3 53 20/24 5 22 89 168 122 15 421 25/29 1 2 25/29 1 2 25/18 58 1 205 1074L 4 12 31 143 294 185 19 688	TOTAL 1 5 23 67 246 327 128 797 400 5/9 3 10/14 2 2 2 2 9 2 17 15/19 1 1 8 30 43 25 10 118 20/24 2 7 42 178 282 75 586
600 10/14 1 2 3 3 3 3 2 1 18 18 15/19 1 5 6 47 46 28 7 140 20/24 5 16 58 202 187 36 504 25/29 1 7 14 4 26 70 140 20/24 6 26 21 3 26 115 265 221 44 688	25/ 29 5 23 36 8 72 TOTAL 1 8 17 79 254 345 93 797 600 5/ 9 1 1 1 1 4 10/ 14 1 5 3 6 5 1 21 15/ 19 1 2 3 15 35 74 59 17 206
800 5/9 1 1 2 10/14 2 2 2 1 3 13 4 27 15/19 2 2 2 13 49 90 50 16 224 20/24 5 10 68 195 142 14 434 25/29 1 1 1 1 1	20/ 24 3 10 38 173 248 89 561 25/ 29 1 5 1 174
TOTAL 5 4 9 24 120 300 196 30 688 100 5/9 1 1 3 1 6 10 10/14 1 4 1 7 23 9 2 47 15/19 3 1 1 5 18 61 112 80 36 317 20/14 20 2 2 15 60 140 85 14 318 1014 1014 6 3 9 33 128 278 175 52 688	15/ 19 1 2 7 18 48 114 80 27 303 20/ 24 3 13 41 152 191 49 49 49 10 1000 5/ 9 1 2 1 7 10/ 14 2 4 2 3 4 13 26 18 7 79 15/ 19 1 1 5 11 30 41 129 130 50 410
1200 5/ 9 1 1 1 9 26 40 18 6 1 108 15/ 19 2 1 2 11 29 75 102 111 26 419 20/ 24 1 1 1 1 0 46 63 26 5 1 154 107 107 14 6 5 5 13 48 149 267 156 37 2 688	20/24 3 4 5 10 49 118 93 19 300 TOTAL 3 8 12 19 44 106 273 249 83 797 1200 5/9 1 2 1 1 1 7 10/14 4 4 5 8 17 23 46 29 7 143 15/19 1 5 8 23 31 80 176 160 48 338
1400 5/9 1 1 3 3 9 10/14 8 5 6 9 16 21 57 33 11 1 167 15/19 1 4 11 20 33 96 187 117 28 1 498 20/24 1 1 2 6 2 129 249 154 40 2 688	20/24 1 1 4 3 32 50 15 3 109 10744 6 9 15 37 52 136 272 211 59 797 1400 5/9 2 2 1 1 4 3 13 10/14 7 11 14 11 20 27 55 42 15 202 15/19 3 10 15 20 48 107 187 138 44 572 20/24 1 1 3 3 1 10
ALTITUDE AIR TEMP OO 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 UBS (METERS) (C) R E L A T I V E H U M I D I T Y (%) SEASON! FALL (SQN) TIME (GMT): 00 MR	TÜTAL 10 23 32 33 71 138 243 185 62 797  ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL  ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 0BS  (METERS) (C) RELATIVE HUMIDITY (%)  SEASONI FALL (SON)  TIME (GMT): 12 HR
FREQUENCY OF WFATHER (CODE) FOR FALL -00 HR 1 2 3 4 9 8 TOTAL	FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR
55 139 20 140 8 548 910	1 2 3 4 9 B TOTAL 44 56 8 616 5 181 910
	44 20 0 010 9 101 910

# TABLE IV. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR NORFOLK, VIRGINIA

## (a) Winter

PERIOD: AUG 1955-JULY 196	5			ELV: 9 M 36 53N, 76 12 W
SEASON: WINTER (DJF) ALTITUDE AIR TEMP R E L ABV SFC INTERVAL OO 1( (METERS) (C) 09 19			SEASON: WINTER (DJF) ALTITUDE AIR TEMP R E L A T I V E ABV SFC INTERVAL 00 10 20 30 4 (METERS) (C) 09 19 29 39 4	TIME (GMT): 12 HR H U M I D I T Y (%) TOTAL 60 50 60 70 80 90 100 DBS
0 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL	2 9 6 1 9 20 1 9 17 3 5 2 1 4 32 51	23 23 10 4 2 79 3 39 30 54 23 17 2 195 19 27 25 30 20 4 152 14 11 9 12 11 65 2 6 4 4 6 25	0 -15/-11 -10/-6 -5/-1 1 0/4 5/9 10/14 15/19	2 6 6 8 3 2 1 28 4 13 20 32 31 16 5 122 4 14 20 46 27 33 9 159 1 10 14 10 30 14 5 84 1 1 4 4 5 14 5 34 1 1 2 3 4
200 -10/ -6 -5/ -1 0/ 4	2 3 1 16 27 1 4 18 32 2 11 14 23 5 9 15 2 4 5	3 1 9 16 10 6 2 78 36 29 20 11 3 154 37 27 15 21 8 158 9 9 9 9 11 1 77	TOTAL 1 1 1 200 -15/-11 -10/-66 3 -5/-1 3 8 1 0 / 4 3 6 2 5/ 9 5 4 1	12 44 71 102 100 83 25 438 8 5 4 1 1 1 10 17 20 13 2 1 82 122 30 40 25 13 11 150 16 22 20 15 19 3 2 106 7 2 5 15 13 10 58
400 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19	3 23 63 105 6 7 1 1 18 28 1 5 26 43 5 6 15 19 2 2 15 7 1 2 4 2	1 4 2 19 1 22 6 7 4 87 1 37 28 19 6 2 167 2 31 17 14 12 6 125 1 6 12 12 11 8 1 86 6 8 6 5 1 35	400 -10/-6 3 7 1 -5/-1 4 18 1 0/ 4 6 10 2 5/ 9 3 6 15 1 10/ 14 2 6	1 1 4 9 3 20 12 76 90 73 57 28 2 438 12 6 3 4 33 12 16 19 9 2 1 61 22 39 28 19 6 5 135 18 21 15 10 11 6 1 106 5 6 7 15 14 5 60
0/ 4 5/ 9 10/ 14	1 4 4 19 3 6 13 31 1 13 28 25 7 10 16 17 9 10 11	1 1 3 4 4 1 1 37 26 13 6 6 1 105 30 23 19 8 1 148 25 13 13 8 4 113	107AL 3 22 57 7 1-15/-11	1 2 6 7 3 .21 70 88 7 4 63 40 20 1 438 10 6 2 6 40 10 23 17 10 3 89 10 81 23 15 5 5 128 14 15 13 7 6 7 94 14 15 13 7 6 7 94
707al 1: 800 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		106 71 60 38 13 1 519 2 2 5 11 1 2 1 50 25 15 10 4 1 113 27 16 17 5 135 17 21 13 10 5 123 12 12 13 13 11 7 78	15/ 19 1 TOTAL 19 34 67 800 -15/-11 19 36 67 -10/-6 5 6 5 1 -5/-1 2 12 17 17 0/ 4 6 13 16 1 5/ 9 8 13 13 13	1 4 2 3 15 61 86 62 57 33 19 438 3 10 10 5 3 1 75 10 10 5 3 1 75 17 23 11 12 1 95 16 27 19 11 3 2 115 18 17 12 12 5 6 1 105
TUTAL 1: -157-11 -107-6 -57-1 1: 07-4 1: 07-4 1: 07-7	1 5 6 3 10 16 0 16 15 18 6 24 15 24	i     2     1     9       i     1     6     1     2     58       i     2     1     1     2     1     14       i     2     1     1     4     3     2     1     14       i     2     0     1     1     4     8     1     1     38     1     30     1     3     1     1     3     1 <td< td=""><td>1000 -15/-11 1 4 -10/-6 10 2 4 -5/-1 6 15 13 0/ 4 15 19 15 5/ 9 11 15 13</td><td>7 7 2 13 15 3 60 11 68 87 53 52 31 11 1 438 43 10 11 2 6 1 46 20 20 12 9 3 91 10 15 15 15 15 13 9 3 2 104</td></td<>	1000 -15/-11 1 4 -10/-6 10 2 4 -5/-1 6 15 13 0/ 4 15 19 15 5/ 9 11 15 13	7 7 2 13 15 3 60 11 68 87 53 52 31 11 1 438 43 10 11 2 6 1 46 20 20 12 9 3 91 10 15 15 15 15 13 9 3 2 104
TUTAL 4: 1200 -15/-11 -10/-6 -5/-1 1: 0/ 4 2: 5/ 9 1:	1 4 3 8 6 15 9 5 8 15 27 4 21 25 26	3 5 2 1 16 9 14 9 1 1 63 7 17 16 7 6 1 112 5 12 14 11 5 4 142 3 10 21 18 12 8 134	1200 -15/-11 1 3 -10/-6 10 2 8 : -5/-1 10 16 22 : 0/ 4 21 15 24 :	4 3 8 5 12 4 49 4 4 2 3 9 9 70 78 43 49 31 9 2 438 4 4 1 130 9 3 5 1 48 10 9 3 5 1 48 14 19 11 3 5 100 26 21 11 9 5 2 134 12 7 13 13 8 3 2 97
15/ 19 TOTAL 1400 -20/-16 -15/-11 -10/-6 1 -5/-1 2 0/ 4 3 5/ 9 2 10/ 14	7 54 84 81 2 4 2 4 1 9 11 10 3 12 16 16 0 28 29 19 3 19 16 9 5 4 3	1 1 2 1 1 5 19 1 1 1 5 19 1 1 1 1 1 1 1 1 1 1	10/ 14 3 2 3 15/ 19 TUTAL 55 53 71 -15/-11 2 2 2 -10/ -6 13 3 6 -5/ -1 15 12 15 0/ 4 27 28 27 5/ 9 15 15 11 10/ 14 1 3 1	7 3 10 6 7 2 43 2 1 1 3 36 73 63 51 36 27 7 2 438 5 2 6 19 11 8 5 3 3 52 15 13 7 5 5 87 14 16 18 8 8 3 149 14 11 6 11 13 6 102 1 5 9 5 3 1 29
TOTAL 9.  ALTITUDE AIR TEMP OO 1. ABV SFC INTERVAL 09 1. (METERS) (C) R E L SEASON: WINTER (DJF)	0 20 30 40	) 50 60 70 80 90 100 TOTAL	ALTITUDE AIR TEMP 00 10 20 30	60 55 51 32 32 10 438 40 50 60 70 80 90 100 TOTAL 49 59 69 79 89 99 0BS H U M I D I T Y (%) TIME (GMT)! 12 HR
FREQUENCY OF	WEATHER (CODE 3 4	E) FOR WINTER-OO HR 9 B TOTAL	FREQUENCY OF WEATHER (CDI 1 2 3 4	DE) FOR WINTER-12 HR 9 B TOTAL
38 267	71 448	8 71 903	55 333 72 403	5 35 903

#### TABLE IV. - Continued

# (b) Spring

PERIOD: AUG 1955-JULY 1965		ELV: 9 M 36 53N, 76 12 W
SEASUN: SPRING (MAH) ALTITUDE AIR TEMP R E L A T I V E H U ABV SFC INTERVAL 00 10 20 30 40 5 (METERS) (C) 09 19 29 39 49 5	MIDITY (%) TOTAL ALT 0 60 70 80 90 100 OBS ABV	ON: SPRING (MAM) TUDE AIR TEMP R E L A T I V E H U H I D I T Y (\$1 TUTA) SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS ERS) (C) 09 19 29 39 49 59 69 79 89 99
3 13 2 2 10 14 6 13 18 2 2 15 17 19 4 8 25 1 20 27 27 6 1 2 25 29 2 7 6 1 2 25 29 2 7 6 1 2 25 29 2 7 6 1 2 25 29 2 7 6 1 2 25 29 2 7 6 1 2 25 29 2 7 6 1 2 25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 12 15 19 10 4 119 3 22 20 17 8 1 118 5 16 16 14 3 81 7 8 3 43 11 5 96 78 62 32 5 508 5 5 1 35 8 18 14 8 4 100 5 16 19 6 8 126	0
15/ 19 4 13 16 1/ 20/ 24 5 7 12 1/ 25/ 29 1 3 8 4 1/ 30/ 34 1 1 TUTAL 2 25 66 86 11/ 400 -5/ -1 2 5 5/ 5/ 9 1 3 18 30 2: 10/ 14 11 22 23 2: 15/ 19 4 12 20 2: 15/ 19 4 12 20 2:	5 18 17 9 1 85 7 6 1 40 9 90 66 39 17 1 508 1 1 9 8 3 1 1 43 2 12 12 5 3 106 1 17 13 9 6 124 1 15 17 15 3 115 2 0 20 13 4 2 83	20/ 24 1 4 1 13 21 15 10 2 67 25/ 29 1 1 1 1 12 20 56 707AL 1 2 35 64 85 110 74 74 29 474 00 -10/ -6 1 1 1 2 2 56 67 67 67 67 67 67 67 67 67 67 67 67 67
25/ 29 1 2 6 5 10 TOTAL 3 26 77 108 10 -10/ -6 1 1 1 1 -5/ -1 5 2 2 0/ 4 2 4 11 19 12 5/ 9 2 11 19 24 17	70 58 34 16 508 6 2 1 1 10 18 8 4 1 61 12 8 8 4 105	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
10/ 14 14 26 19 25 15 15/ 19 1 4 10 25 15 20/ 24 1 2 9 9 21 25/ 25/ 29 1 1 5 2 7 TOTAL 7 36 86 101 106 800 -10/ -6 1 3 7 3 6 6 101 106 5/ 9 1 12 20 28 18 10/ 14 1 9 20 20 31 15/ 19 2 12 17 17	1 16 21 14 5 115 20 9 2 2 75 16 71 52 33 16 508 8 1 2 2 21 10 8 1 1 76 13 6 8 3 109 11 14 7 5 118 2 28 20 18 3 117	15/ 19 1 8 10 14 15 15 24 26 8 121 20/ 24 6 8 11 13 9 11 25/ 29 1 2 3  TUTAL 3 36 79 99 72 63 57 46 19 474  -10/ -6 3 1 3 4 9 5 3 1 1 27 0/ 4 2 5 15 24 19 7 3 2 4 81 5/ 9 3 10 15 23 21 10 7 4 3 96 10/ 14 10 17 21 18 14 9 13 4 106 15/ 19 1 5 11 18 15 27 24 19 3 123 20/ 24 4 6 7 8 9 3 3 37
20/ 24 1 1 6 10 16 25/ 29 2 1 TOTAL 7 36 78 98 103 1000 -10/ -6 1 1 2 -5/ -1 2 3 6 6 9 0/ 4 7 7 10 26 12 5/ 9 2 10 26 21 14	1 4 10 82 55 35 12 508 1 1 6 1 4 31 11 10 1 87	-5/-1 2 1 6 4 14 3 4 1 1 36 1 7 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9
10/ 14 4 3 15 19 30 15/ 19 2 10 18 20 20/ 24 1 1 6 5 11 TOTAL 16 26 74 96 102 -15/-11 1 2 2 -10/ -6 1 3 2 -5/ -1 2 3 7 9 15 0/ 4 8 8 13 23 21 5/ 9 4 8 20 22 1	15 14 7 5 112 31 25 11 3 121 12 3 1 40 12 83 69 31 11 508 2 1 9 4 3 43 15 10 2 1 101 12 12 13 4 109	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
15/ 19 1 2 4 15 22 20 20 24 1 3 4 6 70 741 21 28 61 97 100 1400 -1.5/-11 -2.0 2 3 3 4 6 70 74 74 75 75 75 75 75 75 75 75 75 75 75 75 75	32 17 9 1 103 4 9 21 14 91 65 36 9 508 1 1 16 9 6 2 54 9 14 6 1 105 12 14 12 5 111	TOTAL 19 39 70 79 99 77 49 29 13 474
20/ 24 1 51 82 100 ALTITUDE AIR TEMP 00 10 20 30 40 50 ABV SFC INTERVAL 09 19 29 39 49 59 (METERS) (C) R E L A T I V E H U SEASON; SPRING (MAD)	ABV 60 70 80 90 100 TOTAL (MET	RS) (C) RELATIVE HUNIDITY (%) INISPRING (MAM) TIME (GMT) 12 HR
FREQUENCY OF WEATHER (CODE) FO	R SPRING-00 HR	FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR 1 2 3 4 9 B YOTAL
1 2 3 4 9 40 325 40 253 7	B TOTAL	46 345 53 374 2 100 920

## TABLE IV. - Continued

# (c) Summer

PERIOD: AUG 1955-JULY 1965	ELV: 9 M 36 53N, 76 12 W
SEASON: SUMMER (JJA) ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (X) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	
0 10/14 1 1 1 15/19 1 2 2 1 3 11 9 25 20/24 12 34 35 48 42 32 1 204 25/29 5 33 50 95 44 44 6 327 30/34 3 14 37 25 5 88 35/39 1	20/ 24 1 5 20 51 140 215 5 437 25/ 29 3 5 18 27 28 12 93 30/ 34 1 5 8 1 15
TOTAL 10 61 123 156 150 98 47 1 646 200 10/14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	200 10/ 14 1 1 2 3 7 15/ 19 1 3 8 21 21 22 13 89 20/ 24 1 3 14 26 60 125 178 73 480 25/ 29 1 3 8 37 35 25 2 111 30/ 34 1 1
30/ 34 1 4 13 7 2 27 707 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1	400 10/14 1 3 2 2 1 4 13 15/19 4 6 22 27 31 29 16 135 20/24 5 18 46 83 137 139 33 461 25/29 6 10 35 21 7 79
30/ 34 1 1 5 1 8 TOTAL 8 8 61 136 173 154 91 15 646 600 10/ 14 1 2 2 1 3 1 10 15/ 19 3 11 11 22 34 33 15 12 141 20/ 24 4 6 30 57 87 95 62 10 1 332	600 10/14 1 4 1 2 3 3 3 17 15/19 2 8 21 24 42 40 48 21 206 20/24 2 4 37 55 82 124 92 21 417 25/29 1 1 7 11 20 7 1 48 TUTAL 2 4 17 66 92 147 174 144 42 688
25/ 29 1 2 10 40 56 30 3 142 30/ 34 1 1 TOTAL 8 21 53 121 178 158 83 23 1 646 800 5/ 9 1 1 1 10/ 14 1 5 3 5 3 3 2 2 24 15/ 19 3 9 13 47 49 49 26 11 207	10/ 14 2 3 5 6 7 8 4 35 15/ 19 3 9 31 40 61 60 61 16 281 20/ 24 4 23 54 117 104 55 4 361 25/ 29 1 1 2 6 10
20/ 24 4 6 19 64 119 117 40 6 1 376 25/ 29 1 4 13 16 4 38 TOTAL 8 21 39 129 187 173 68 20 1 646 1000 5/ 9 1 1 2 10/ 14 1 3 9 6 21 3 6 3 52	10/ 14
15/ 19 3 3 9 24 40 67 79 42 13 28C 20/ 24 4 9 15 54 93 93 31 3 1 302 25/ 29 1 3 4 1 5 TOTAL 3 8 22 48 103 186 176 79 20 1 646	1200 5/9 2 2 5 3 12 10/14 1 3 8 18 34 17 22 9 1 1 114 15/19 1 4 16 20 66 103 130 71 7 418 20/24 2 14 29 51 41 7 144
10/14 4 5 12 21 21 11 11 2 87 15/19 2 6 10 29 53 87 111 54 7 1 360 20/24 2 6 15 32 61 60 16 1 193 TÜTAL 2 12 22 56 107 172 182 82 10 1 646 1400 5/9 1 2 2 4 2 11 10/14 3 10 8 16 19 33 34 14 4 141	1400
15/ 19 3 11 19 25 58 100 127 63 6 1 412 20 24 3 3 7 14 29 19 6 81 7074L 6 25 30 50 91 164 184 85 10 1 644 85 10 1 644 85 10	ALTITUDE AIR TEMP OO 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS (METERS) (C) R E L A T I V E H U M I D I T Y (%)
(METERS) (C) RELATIVE HUMIDITY (%) SEASON'S SUMMER (JJA) TIME (GMT): 00 MR	FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR 1 2 3 4 9 8 TOTAL
FREQUENCY OF WEATHER (CODE) FOR SUMMER-OO HR 1 2 3 4 9 8 TOTAL	28 178 20 445 5 243 919
51 180 36 159 7 488 920	

19

#### TABLE IV. - Concluded

# (d) Fall

PERIOD: AUG 1955-JULY 1965	ELV: 9 M 36 53N, 76 12 W
SEASON: FALL (SQN) ALTITUDE AIR TEMP R F L A T I V E H U H I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 OBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASON: FALL (SDN) TIME (GHT)1 12 HR ALTITUDE AIR TEMP RE LA T I V E H U M I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (HETERS) (C) 09 19 29 39 49 59 69 79 89 99
0 -5/ -1 1 1 2 1 1 3 4 12 15 15 9 6 10 12 12 8 2 90 10/ 14 4 12 22 27 30 31 7 1 134 15/ 19 1 7 20 22 60 35 22 2 169	0 -5/-1 2 2 2 1 2 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
20/ 24	20/ 24
TOTAL 6 33 74 103 148 139 85 25 613 400 -5/-1 1 1 1 0/ 4 1 2 6 5 2 16 5/ 9 2 7 15 15 7 10 4 1 61	TOTAL 1 4 41 67 96 149 146 44 548 400 -5/-1 3 1 4 41 67 96 149 146 44 548 400 -5/-1 2 11 7 1 22 5/9 3 6 18 16 17 3 65 10/14 8 15 24 26 24 19 1 117
10/14	10/ 14 8 15 24 26 24 19 1 117 15/ 19 1 7 16 26 46 40 42 9 187 20/ 24 5 10 24 33 60 15 147 25/ 29 1 3 1 1 6 7071 1 2 21 44 95 121 116 124 25 548 600 -10/ -6 1 1 2 2 3 8 60 4 1 1 1 2 10 8 3 1 27 5/ 9 2 4 15 14 20 10 2 67 10/ 14 1 6 12 9 30 24 93 1/ 3 135
20/24 1 3 7 19 34 41 22 6 133 25/29 3 6 16 3 6 16 TOTAL 4 17 38 90 101 133 141 67 22 613 800 -5/-1 1 1 2 2 2 8 5/9 1 5 8 22 20 18 12 6 1 22 5/9 1 5 8 22 20 18 12 6 1 93 10/14 2 6 22 29 29 39 30 13 7 167 15/19 3 8 11 17 25 52 46 30 9 201 20/24 1 1 9 11 32 37 15 2 108	15/19 9 9 19 23 30 48 45 7 190 20/24 3 6 12 27 23 38 7 116 25/29 1 1 1 1 1 1 548  TOTAL 2 20 29 54 91 114 118 103 17 548  800 -10/-6 1 3 4 2 2 20 29 55 9 9 1 29 5/9 5 7 21 14 18 5 3 73 10/14 3 4 15 25 37 27 32 18 6 167
25/29	15/ 19 1 9 10 16 24 36 47 37 9 189 20/ 24 1 3 11 16 17 27 1 76 25/ 29 1 1 1 1 2 7 1 76 1000 -10/ -6 1 1 2 2
5/ 9 5 9 11 18 15 22 16 4 2 102 10/14 8 19 11 32 20 34 43 21 11 199 15/ 19 12 7 11 7 22 49 42 29 8 187 20/ 24 2 3 5 8 22 26 7 73 TOTAL 26 41 41 75 80 135 130 63 22 613 1200 -10/ -6 1 1 1 1 3 -5/ -1 1 2 4 1 2 2 3 3 15	0/4 2 4 4 5 8 7 2 32 5/ 9 1 10 14 17 15 14 11 4 86 10/ 14 7 15 19 18 29 28 33 25 8 182 15/ 19 5 7 11 13 22 32 42 38 8 178 20/ 24 1 2 6 8 8 14 14 53 10/ 14 16 37 51 63 88 92 104 81 16 548
0 / 4	100
10/ 14 29 20 32 22 28 34 36 24 10 235 15/ 19 10 13 13 15 16 35 41 20 3 1 167 20/ 24 1 1 1 5 4 1 1 12 TOTAL 66 58 75 61 67 113 101 55 16 1 613	5/ 9 13 24 14 14 19 16 15 7 1 123 10/ 14 17 21 24 16 24 37 36 32 3 210 15/ 19 9 7 5 13 14 28 35 26 4 141 20/ 24 1 1 2 1 1 7
ALTITUDE AIR TEMP OO 10 20 30 40 50 60 70 80 90 100 TOTAL ABV 5FC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS (MÉTERS) (C) R E L A T I V E H U H I D I T Y (%) SEASONI FALL (SDN)	TOTAL 45 67 53 52 68 93 93 69 8 548  ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 085 (METERS) (C) R E L A T I V E H U H I D I T Y (\$)
FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR 1 2 3 4 9 B TOTAL	SEASON: FALL (SON) TIME (GMT): 12 HR
32 192 51 402 22 211 910	FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR 1 2 3 4 9 B TOTAL
	37 254 57 444 14 104 910

TABLE V.- FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR CARIBOU, MAINE

(a) Winter

PERIOD: J	IAN 1959-DE	C 19	68																		ELV:	191	м	46 5	2N,	68 (	)1 W
	INTER (DJE AIR TEMP INTERVAL (C)	R E	10	T I 20 29	V E 30 39	H 40 49	U M 50 59	60 69	1 1	T I ME Y 80 89		()	OO HR TOTAL OBS	SEASON: W ALTITUDE ABV SFC (METERS)	INTER (DJF AIR TEMP INTERVAL (C)	RE	10	T I 20 29	V E 30 39	40 49	50 59	60 60 1 D	1 T 70 79	T I ME Y 80 89	(GMT (% 90 1 99	); ; ) ;	12 HR TOTAL DBS
200	-30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 TUTAL -30/-26 -25/-21 -10/-6 -5/-1			2	2 3 2 2 2 9	8 6 8 4 32 1 9 10 14 12 10	1 6 12 20 10 7 56 1 7 23 26 13 4	1 20 29 21 2 1 74 2 12 31 23 16	6 38 40 23 1 108 2 30 38 19	3 17 33 31 6 1 91	4 8 10 22	2 2	1 17 50 112 118 75 20 1 394 2 18 48 117 114 80 13	200	-35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-91 707AL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11				2 3 5	16 3 5 4 3	2 10 21 15 6 1 1 1 56 1 9 16 20 17 6	2 13 29 39 15 3 1 102 9 25 48 37 14	2 8 17 40 32 9 2 1 111 13 26 47 17	3 25 44 37 22 2 133	3 14 23 12 52	3 1 6	6 37 80 124 100 64 49 20 11 22 60 107 137
<b>400</b>	5/ 9 TUTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TUTAL -30/-26	1	1	2 1 5 1 7	11 2 10 7 2 1	56 2 8 13 11 19 6 1	75 1 3 19 23 14 7 1	84 7 16 21 31 9 2	1 94 5 22 28 20 2 1	1 10 18 12 1 1	21 2 10 11 2	1 1 1 3	2 394 3 18 56 101 133 69 11 2 1394	400	-5/ -1 0/ 4 5/ 9 TUTAL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4		1		3 5 3	15 1 1 4 8 9 2	1	137 11 18 39 33 18 3	5 4	30 8	10 9 42 2 11 17 7 5	2 2 3 2 2 2	50 22 2481 2 23 46 93 129 111 54
	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		1 1 2	5 3 2	1 5 13 10 7 1	3 13 20 16 7 2	12 10 18 15 2 1	23 25 25 7 2	1 2 13 28 13	2 10 15 12 2 2	6 12 11 1	2 1 1 4	21 55 110 127 62 10 2 1	600	10/14 TOTAL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1		2	1 3 5 1	11 5 8 4	26 6 11 15 11 3	80 2 7 11 17 16 16	123 2 7 1 / 20 31 20	105 3 8 20 34 23 11	81 2 1 3 16 29 14	1 7 9 14 10	12	1 481 4 21 44 84 134 127
800	-35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9		1 2 3 4 2	1 10 5 3 2	2 6 18 13 7 1	2 3 7 16 15 2 1	2 14 11 14 13 4	1 6 18 17 11 5	1 3 6 14 33 7 3 1 68	2 11 18 6	1 8 18 7 1	1 4 1 1 7	1 7 28 53 111 133 45 12 4	800	0/4 5/9 TOTAL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/-6		2 2 4 8	2 5 5	18 3 9 17 8	1 50 1 5 9 12 13	2 3 10 9 23 14	2 104 3 11 13 18 24 12	2 12 16 27 16	5 1 71 1 2 4 17 30	1 1 10 5	1 3 11	12 6 481 5 19 46 79 135 128
1000	TOTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 TOTAL		12 1 5 3 5 2	21 5 8 9 6 3	2 5 15 9 4	10 11 18 19 5	5 13 14 18 10 3 2 16	61 3 2 11 15 9 3	1 4 6 19 20 7 3	1 1 1 15 22 5	36 3 5 16 5 1 2 33	1 2 1	374 11 29 57 119 119 43 12 4	1000	-5/ -1 0/ 4 5/ 9 TOTAL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11		15	14 14 12 7	3 1 4 2 3 1 1 2 1 2 1 2 1 3	4 44 7 11 14	3 1 65 2 4 9 12 21	88 4 6 13 17	9 2 84 5 9 16 26	10 4 1 69 1 2 6 13	1 1 4 5	12 2 1	51 13 5 481 6 17 45 86 130
1200	-30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -4 5/ 9		4 8 9 8 2	2 4 10 6 6	1 11 12 7 1	1 7 13 19 17 3	5 9 11 13 9 3	4 3 9 23 5 3 2	1 7 22 12 5	1 1 1 11 20 3	1 3 11 15 3 1	1 2 4	12 28 58 130 109 41 12	1200	-10/ -6 -5/ -1 0/ 4 5/ 9 TDTAL -35/-31 -30/-26 -25/-21 -20/-16		1 17	1 1 27 27	13 6 1 55 5	13 2 47 2 5 8	10 4 2 64 2 5 4 12	20 2 3 77 3 8 13 13	20 4 2 82 5 9	28 7 2 1 60	3	5 1 13	139 37 17 4 481 5 20 43 88
1400	TOTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 TOTAL		31 4 9 10 7 4	31 4 6 12 6 7 1	37 1 6 11 20 4 2	62 5 11 17 19 11 4	51 2 4 10 19 3 3 1	49 4 6 12 10 5	52 1 5 8 20 11 1 2 1	38 3 5 12 14 4	35 1 1 9 12 4	2 2 1	394 12 33 65 125 104 39 12	1400	-15/-11 -10/ -6 -5/ -4 5/ 9 TOTAL -40/-36 -35/-31 -30/-26		14 12 2 1 1 35	15 9 2 3 40	12 15 5 47	21 14 7 4 1 62	15 12 2 52 52	9 17 1 64 2 1	25 11 4 1 77	13 25 6 5	7 12 6 5 1 37	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	133 132 36 20 481 23 23
ALTITUDE ABV SFC (METERS) SEASON: W	AIR TEMP	)	10 19 L A	20 29 7 I	30 39 V E	40 49 H	50 59 U M	60 69 1 D	70 79 I T	80 89 Y TIME	90 1 99 (%	00	TOTAL OBS		-25/-21 -20/-11 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9		1 7 15 13 2 3	10 15 5 2 2	7 19 14 8 4	10 21 18 6 1	8 14 10 3	10 20 1/ 15 2	19 18 11 2 3	3 1 14 19 6 3 1	1 9 11 3 3	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	87 144 122 34 20 3
	1 129	2	3		4		6	" B 34		TOTA:	L			ALTITUDE ABV SFC (METERS)	AIR TEMP Interval (C)	00 09 R E	10	20 29	30 39	40 49	50 59	60 69 1 D	70 79	80 89	90 l 99		OBS
	127	200	119	96	J		۰	34		90	•				INTER (DJF	) E	L A	. 1	v E	н	U M	10			(%) (GMT		.2 HR
															FREQUEN	CY OF	WE.		R (C	DDE)	FOR 9	WIN1 B		12 H			
															136	175	104	45	6		7	25		90	3		

TABLE V. - Continued

													(b)	Spring		ţ.				. :		٠.	÷		:-	, <u>\$</u>	
PERIOD:	JAN 1959-DE	C 196	8												* i *	, ,	٠.				ELV	: 19	1 H	46	52N,	68	01 W
SEASON: ALTITUDE ABV SFC (METERS)	SPRING (MAM AIR TEMP INTERVAL (C)	R E 00	L A 10 19	T I 20 29	30 39		50 59			80	(		OO HR TOTAL OBS	SEASON: ALTITUDE ABV SFC (METERS)	INTERVAL	R	10	A T 20 29	30	- 40	50		D I 70 79			<b>%</b> )	12 HR TOTAL OBS
200	-15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19 20/24 25/29 TDTAL		2 2	4 6 11 4 1 26	1 2 1 3 16 18 16 12 1 70	5 4 6 7 28 13 13 4 2 82	1 6 10 24 28 7 4	1 6 11 19 16 6 5 2	5 12 21 13 4 2	1 6 9 12 7 3	2 11 . 6 4 1	1	9 24 48 95 125 55 24 49 9	0	-30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24					1 1 2 1	3 2 5 6 3 2 7 9 2	1 4 6 7 9 12 33 17	3 9 12 17 27 37 16 7 5	2 13 15 32 46 19 12 2	1 5 17 47 21 10	ž i	4 10 23 41 50 90 172 84 41 8
	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		1	2 11 6 12 6 1 38	7 23 21 10 7 280 3	11 10 21 33 11 9 5	4 12 21 14 7 4	6 14 19 14 5 4 1	3 11 14 14 14 1 1 1	5 9 6 6 1	2 11 5 1		28 57 104 120 64 43 20 449	200	TUTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19				1 1 1	6 5 3 7 13 5 2	39 2 7 8 18 16 34 27 6	98 5 6 11 22 26 27 16 9		3 10 14 32 12 8	7 24 16 5	1	525 7 17 37 60 102 161 90 37
460	-15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		1 2	1 9 15 8 8 4 1	6 10 19 29 19 11 4 1	10 11 23 19 12 4 5	5 14 12 12 12 8	9 8 19 8 11 4	3 14 15 13 3 1	2 3 9 8 2 1	5 9 4 1		36 66 117 108 64 29 14 2449	400	20/ 24 TUTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9		1	4 1 2 1	3 1 5 1 4 19 11	39 4 3 11 21 21 18	123 1 4 8 26 18 28 12	126 6 8 11 23 21 11	1 101 1 6 8 19 15 10	80 2 7 14 22 10 7	52 1 12 16 14 2	1 1	525 1 16 34 64 116 144 89
600	-20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19 20/24		2 2 1 5	1 9 14 6 5 1	1 6 10 24 21 17 11 2 96	1 7 9 11 20 18 12 4 86	4 4 14 23 9 8	1 9 15 10 11 7 2	5 15 20 8 4 1	4 11 9 10 3	2 5 9 1 1		2 18 39 82 126 92 58 24 8	600	15/ 19 20/ 24 TOTAL -25/-21 -20/+16 -15/-11 -10/ -6 -5/ -1		1 3 1	1 8 1 6 4	47 2 5 5 16 22	91 1 3 5 14 16	5	1 87 1 4 6 14 17	2 4 65 5 9 20 13	1 63 2 9 16 18	45 2 11 16	2	20 25 525 3 17 35 71 131
800	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		2 1 1 1	2 1 9 10 5 2	3 7 16 22 19 15 6	2 7 6 10 26 13 13	1 6 7 14 18 7 3 1	1 11 15 13 10 4	2 12 15 16 5 5 3	9 13 14 8	3 8 3 4 3	4	6 20 57 93 126 76 49 18 449	800	5/ 9 10/ 14 15/ 19 20/ 24 TBTAL -25/-21 -20/-16 -15/-11 -10/ -6		2 2 2	3 2 1 17 3 1	12 7 2 71 2 5 6 16	18 9 3	7 8 3 1 112 2 10 5 10 20	13 4 2 76 1 3 9	7 2 4 60 1 4 11 22	12 4 61 2 12 17	7 2 38 1 1 14	3	80 38 16 1 525 5 18 40 78 134
1000	TOTAL -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24		2 2 1 1	30 1 2 6 7 6 1 2	91 4 6 5 20 21 18 11 3	1 6 7 14 19 9	3 1 7 21 9 13 3	1 6 15 12 15 11 3	8 13 18 12 4	11 12 15 3	1 2 10 7 6 2	1 2 2	31 63 117 107 70 37 13	1000	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL -25/-21 -20/-16		1 5	10 5 2 2 32	19 15 8 71 2 4	23 13 7 4 1 103	27 10 4 2 90 3 9	8 8 2 3 1 63 1 2 9	12 7 2 2 61 2	13 9 6	9 8 1 34	3 3	124 78 33 13 2 525 6 20
1200	TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		2 3 1 2 2	26 2 2 12 6 3	89 1 3 9 19 19 10 8	3 6 18 11 19 7	60 2 8 11 17 13 8 3	63 6 10 17 11 11	9 19 17 10 6	3 11 12 15 5 2	28 7 10 6 4 2	i 1 3 1	449 1 10 39 77 126 94 68 26	1200	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL -25/-21 -20/-16 -15/-11		1 1 7	5 12 11 4 2 37 2	17 20 17 13 8 86 2 6	13 20 14 13 6 4 81 1	11 25 22 14 4 3 102 3	11 13 8 8 2 1 55 1 8	6 24 15 3 4 1 60	12 20 12 7 6	2 9 6 1 28	1 3 2 7	79 147 111 71 34 9 525 7 21
1400	15/ 19 TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9		3	1 27 1 2 5 13 5 2	2 74 2 3 6 10 15 15 9 3	2 66 1 2 7 21 11 15 5	3 65 7 13 17 14 8 6	60 3 12 15 21 10 9	10 22 15 14 4	2 8 15 8 5	31 5 8 7 4 3	6 4 2	449 2 11 49 90 130 85 58 21	1400	-15/-11 -10/-6 -5/-1 0/ 4 5/ 9 10/ 14 15/ 19 TDTAL -30/-26 -25/-21		6 7 1 2 2 2	9 17 9 4 1	15 19 16 11 5 80	13 22 9 10 10 3 81	20 19 11 15 3 1 82 1	9 15 7 3 2	11 19 14 5 6	11 20 16 6 4	5 8 7 4 1 26	1 1 6 1	100 147 96 61 34 5 525 1 6
ABV SFC (METERS)	(C) PRING (MAM)	00 1 09 1 R E L	Δ	20 29 T I	VE	н	50 59 U M	I D		Y TIME	99 (3 (GMT	()	449 TOTAL OBS		-15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19		4 11 10 2 1 2	11 16 10 5	11	7 14 19 11 12 5 2 71	15 18 16 12 9 3	5 17 15 7 7 2	9	8 13 16 13 6 2	1 5 8 9 3 1	3 1	52 120 142 92 54 23 25
	FREQUENC 1	Y 0F	3	THEF	4	UVEI	9	В	ING-	TOTA	Ĺ			ALTITUDE ABV SFC	AIR TEMP INTERVAL	00 09	10 19	20 29	30 39		50 59		70 79	80 89	90 10 99		DTAL DBS

FREQUENCY OF MEATHER (CODE) FOR SPRING-12 HR 1 2 3 4 9 8 TOTAL 88 231 71 435 5 90 920

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 0BS (METERS) (C) RELATIVE HUHIDITY (%) SEASONI SPRING (MAM)

78 313 75 196

## TABLE V. - Continued

# (c) Summer

PERIOD	JAN 1959-DE	C 196	.8																	-	ELV:	191	м	46 5	2N.	68 (	)1 #
SEASON:	SUMMER (JJA AIR TEMP INTERVAL	) R E		T I 20 29	V E 30 39	40 49	U M 50 59	1 D			12		OO HR TOTAL OBS	SEASON: S ALTITUDE ABV SFC (METERS)	UMMER (JJA AIR TEMP INTERVAL (C)	) R E 00 09	L A	T I 20 29	30		U M 50 59	I D 60 69	I T			*)	12 HR TOTAL OBS
0	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29			3 6 2	2 9 16 15	2 25 52 13	5 34 77 15	1 6 30 56 8	10 41 43 7	11 34 20	2 4 23 13		3 40 199 283 60	0	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29			1		1	6 5 1	6 19 16	13 44 19 4	25 100 66 8		1 0 1 0 1 3	85 309 246 23
200	30/ 34 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24			11 5 2	43 3 17 17	1 93 10 49 57	131 11 52 59	1 102 1 12 46 38	101 16 37 25	65 12 32 15	42 2 6 17 7		3 588 3 70 255 220	200	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19			1	1	2 9 3	7 21 18	16 65 49 8	17 86 59	200 22 66 68	294 1 10 61 59	37	668 1 74 309 256 28
400	25/ 29 TDTAL 5/ 9 10/ 14 15/ 19 20/ 24			2 9 1 7 2	16	23 76 49	11 133 2 22 58 30	2 99 2 17 40 26	3 81 2 21 40	59 2 18 30	32 2 9 21 3		40 588 10 115 297 143	400	20/ 24 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19			1 4 3	1 3 10 7	1 15 11 38 28	13 56 41	138 9 48 54	8 170 1 14 43 57	1 13 48 28	133 1 14 44 34	1	668 3 78 292 253
600	25/ 29 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24			14	7	7 155 4 25 69 22	4 116 3 47 61 25	1 86 7 37 45	76 7 23 40	54 5 24 34	35 3 14 15		23 588 30 185 285 81	600	20/ 24 25/ 29 TOTAL 0/ 4 5/ 9 10/ 14		1	1 9 1 3	1 25 6 13	8 85 13 51	5 1 116 2 19 68	12 123 1 18 42	7 122 1 17 50	92 1 12 45	94 2 13 37	2 1 1	40 2 668 7 100 311
800	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14			11 2 4	2	3	2 138 8 58 59	-	77 15 27 30	64 8 32 24	32 2 4 17	1	7 588 3 57 243 238	800	15/ 19 20/ 24 TOTAL 0/ 4 5/ 9		1	4 1 9 4 3	8 4 31 6 21	29 3 96 25 52	44 6 139 5 33 60	53 8 122 31 39	44 7 119 3 24 44	23 81 19 47	15 67 5 9	1 2 1	221 29 668 14 151 306
1000	15/ 19 20/ 24 TOTAL 0/ 4 5/ 9 10/ 14			2 4 12 3 6	8 33 3	13 105 8 39	12 137 1 14 75	6 127 1 29 63	76 3 18 40	64 2 15 30	3 Z 2 5 2 3	2	47 588 9 96 291	1000	15/ 19 20/ 24 TOTAL 0/ 4 5/ 9 10/ 14		2	1 12 1 4	8 4 39 1 9	32 2 111 5 32 44	42 6 146 11 46 68	46 2 118 3 40 59	28 2 101 9 26 47	79 4 23	59 6 9	1	180 17 668 40 189 313
1200	15/ 19 20/ 24 TDTAL 0/ 4 5/ 9 10/ 14		1	2 11 1 6	8 31 3	24 75 15 35	44 5 139 5 34 67	47 3 143 6 44 59	23 87 10 30 55	18 65 5 16 27	35 2 16 21	2 2 2	282	1200	15/ 19 20/ 24 TUTAL -5/ -1 0/ 4		2	2 11 3	6 2 34	23 104 7	27 3 155	29 2 133 2 14	21 104 12	8 75 9	2 49 1	1	118 8 668 3 65 237
1400	15/ 19 20/ 24 TDTAL -5/ -1 0/ 4 5/ 9		1	3 18 2	6 1 18	13 63 1 20	23 1 130 7 46	25 1 135 7 60	23 118 18 40	10 58 1 9	4 43 4 16	4	107 3 588 1 49 219	1400	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL -5/ -1		2	6 3 18	17 12 7 1 38		19 1 154 1	1 146 2	32 46 15 105	37 2 70 1	21 2 47 1	2	278 82 3 668
	10/ 14 15/ 19 TOTAL	00 0 <b>9</b>	1 4 10	9 2 17 20	7 4 17 30	19 9 49	51 16 120 50	12 135 60	62 12 132 70	31 4 68 80 89	21 42 90 99	2 4 100	259 60 588 TOTAL OBS		0/ 4 5/ 9 10/ 14 15/ 19 TOTAL		3 4 1 8	2 6 2 19	3 19 12 5 39	13 38 29 7 87	16 72 51 8 148	24 53 54 10 143	16 42 48 4	24 34 1	18 14 36	1 2	90 281 253 38 668
(METERS	INTERVAL ) (C) SUMMER (JJ FREQUE	R E			i V	E	ни	4 I (	11	T Y TIME	( GM	%) IT):	00 HR	ALTITUDE ABV SFC (METERS) SEASON:	INTERVAL	09 R (	10 19	20 29 T	30 39 I V	40 49 E		06 69 H I	70 79 D I	89 TY	99	(%)	TOTAL OBS 12 HR
	1	2			4		9		3	TOT	ΔL				FREQUE					CODE							
	73	226	29	9 1	25		4	463	3	91	20				100	128	1		4 09		9	15	B 9	101 9	AL 20		

TABLE V. - Concluded

# (d) Fall

PERIOD: JAN 1959-DEC 1968	ELV: 191 M 46 52N, 68 01 W
SEASON: FALL (SON) ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 0BS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASONI FALL (SDN)  ALTITUDE AIR TEMP R E L A T I V E H U H I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 085 (METERS) (C) 09 19 29 39 49 59 69 79 89 99
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 -20/-16 2 2 2 -15/-11 1 1 5 3 20 -10/-6 1 6 20 11 38 -5/-1 1 15 45 56 4 121 0/ 4 1 2 11 41 98 10 163 5/ 9 3 7 21 89 19 139 10/ 14 5 12 5 4 6 77 15/ 19 5 16 4 25 20/ 24
ΤΟΤΑΣ΄ 1 14 73 149 138 102 76 6 559  200 -15/-11 2 2 2  -10/-6 5 6 7 4 2 22  -5/-1 4 10 23 12 11 3 63  0/ 4 8 21 20 16 16 15 96  5/ 9 2 12 34 34 21 13 16 1 133  10/ 14 15 28 23 22 23 11 2 124  15/ 19 10 21 21 15 8 7 82  20/ 24 7 10 7 4 6 1 35	TOTAL 2 7 47 159 329 43 587  200 -20/-10 1 1 2  -15/-11 1 8 2 11  -10/-6 1 8 20 12 1 42  -5/-1 1 15 42 31 10 99  0/ 4 3 23 51 54 27 4 160  5/ 9 1 14 40 44 33 132  10/ 14 1 6 27 41 33 1 10  15/ 19 1 9 5 15 30
25/ 29 TOTAL 2 56 129 136 99 81 53 3 559 400 -15/-11	TÜTAL 1 6 69 198 191 119 3 587  400 -20/-16
25/29 1 1 5 6 89 123 127 70 70 47 4 559 600 -15/-11 3 1 6 10 6 5 4 40 -15/-11 3 1 6 10 16 5 4 81 6 12 6 12 6 12 6 12 6 12 6 12 6 12 6	20/24 11 1 2 4 107AL 2 6 33 80 122 144 113 81 6 587 600 -20/-16 2 2 2 4 5 1 14 -10/-6 1 3 9 8 12 7 5 45 -5/-1 4 10 16 21 30 21 12 1 115 0/ 4 5 10 17 30 32 21 16 2 133 5/ 9 1 7 15 18 21 26 22 11 5 126 10/ 14 1 4 12 20 20 21 12 1 103
20/24 1 3 4 3 2 1 14 TOTAL 3 7 32 71 111 125 86 71 47 6 559 800 -20/-16 1 1 3 2 2 2 2 1 -15/-11 1 3 2 2 2 2 2 1 -10/-6 4 3 2 4 11 6 5 7 42 -5/-1 1 8 7 11 16 25 17 7 2 94 0/ 4 3 4 4 9 27 27 21 19 8 122 5/ 9 4 9 4 7 31 25 19 18 14 3 134 10/ 14 2 7 10 12 20 18 12 8 2 91 15/ 19 3 2 5 10 16 9 7 3 55	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
20/ 24 1 2 2 3 8 TOTAL 7 23 29 43 100 120 100 80 50 7 559 1000 -20/-16 1 2 1 3 6 13 -15/-11 1 2 1 3 6 13 -10/ -6 1 3 5 2 7 10 13 8 4 53 -5/ -1 2 4 4 11 17 22 19 21 9 1 10 0/ 4 3 3 6 14 16 25 24 16 10 1 18 5/ 9 6 9 4 7 25 23 18 16 13 2 123 10/ 14 7 5 10 15 29 19 12 5 2 104 15/ 19 2 2 4 6 4 10 6 1 35	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
200 / 24	15/19 2 2 3 5 5 5 2 24  1200 -20/-16 1 1 9 36 53 89 120 90 97 58 11 587  1200 -20/-16 1 1 2 1 2 7  -15/-11 1 2 3 6 5 1 2 20  -10/-6 2 2 11 7 10 18 14 14 10 3 91  -5/-1 5 5 6 7 21 22 20 17 13 2 118  0/ 4 6 9 8 12 17 15 14 19 14 4 118  5/ 9 5 11 21 7 11 17 14 17 16 2 121  10/ 14 3 5 13 6 14 18 18 11 10 98  15/ 19 2 3 2 4 3 14
TOTAL 23 39 49 40 57 94 117 84 49 7 559 1400 -207-16 1 2 2 4 5 7 2 23 -157-11 1 2 2 3 5 7 107 107 107 107 107 107 107 107 107 1	TOTAL 22 33 61 42 81 99 91 82 65 11 587 20/-16 1 2 2 1 1 7 7 7 7 10/4 1 1 1 2 8 1 99 91 82 65 11 587 25 25 25 25 25 25 25 25 25 25 25 25 25
ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 IDS (METERS) (C) R E L A T I V E H U M I D I T Y (%) SEASON! FALL (SON)	ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS (METERS) (C) R E L A T I V E H U M I D I T Y (%) SEASONI FALL (SON) TIME (GMT)! 12 HR
FREQUENCY OF MEATHER (CODE) FOR FALL -OO HR 1 2 3 4 9 B TOTAL	FREQUENCY OF HEATHER (CODE) FOR FALL -12 HR 1 2 3 4 9 B TOTAL
101 178 69 406 3 153 910	98 153 67 509 5 78 910

# TABLE VI.- FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR GLASGOW, MONTANA

#### (a) Winter

PERIOD: J	IAN 1959-DE	C 19	68																		ELV:	696	м	48 1	3N, :	06	37 W
SEASON: N ALTITUDE ABV SFC (METERS)	(INTER (DJF AIR TEMP INTERVAL (C)	R E	L A 10 19	7 I 20 29	V E 30 39	40 49	U M 50 59	1 D 60 69	I T 70 79	TIME Y 80 89	(GM1 90 99	<b>6</b> )	OO HR TOTAL OBS	SEASON: W ALTITUDE ABV SFC (METERS)	INTER (DJF AIR TEMP INTERVAL (C)	RΕ	L A 10 19	T 1 20 29	V E 30 39	40 49	U M 50 59	1 D 00 69	I T	TIME Y 80 89	( GM ) 90 99	6)	12 HR TOTAL OBS
200	-35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 14 5/ 9 10/ 14 -35/-31 -30/-26 -25/-21 -20/-16				2 2 1 5	3 2 2 8 7 22 1	1 16 13 4 6 5 14 11 71 3 11	1 8 16 27 17 21 33 12 2 137	1 10 14 24 30 44 39 7 169	6 15 20 20 42 26 2 131	5 3 2 10	2 2	1 43 58 77 80 1124 4 1 5 4 4 3 9 60	200	-40/-36 -35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-9 TOTAL -35/-31 -30/-26 -25/-21 -20/-16					2 1 1 2 6 1 2 3	2 7 10 1 1 2 1 25 3 14 5 4	12 18 25 10 1 9 11 10 17 13 10	1 58 28 14 121 121 124 19 141 142 231 25	25 27 59 52 41 15 219	12 45 36 4 97	1 2	17 499 677 118 113 525 586 3 19 589 66
400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TOTAL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11			2 1 3	2 4 10 16	1 7 17 25 6	22 31 25 5	19 30 43 14 161 15 12 15	30 20 23 2	17 19 6 50	3 2 1 8	1	78 103 125 78 12 549 1 4 36 44 56	400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TUTAL -35/-31 -30/-26 -25/-21 -20/-16 -15/-11			1	4 4 2 2	1 2 4 8 1 23 4 3 4 2	5 21 21 18 1	1 / 29 37 13	20 48 33 2 186 1 11 17 14	27 26 14 97 2 3 912	11 10 6	1 2 1	81 137 115 45 3 586 3 14 41 55
600	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL -35/-31 -30/-26 -25/-21			9 2 11	1 7 9 21 5 1 47	2	9 29 30 32 2 135 1	1 12	17 20 8 4 82	4	13	1	77 112 101 99 18 1 549 1	600	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TOTAL -35/-31 -30/-26 -25/-21 -20/-16			2 2 1 5	4 4 10 2 24	2 5 8	1 2 4 6	1 / 32 35 14 1 140 3 2 12 12	29 32 13 3 120 3 9	19 10 11 60 1 6	23	2	86 127 119 83 9 586 4 10 40
800	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/-9 10/ 14 TOTAL -35/-31 -30/-26 -25/-21		4	1 2 3 10 2 20			5 9 23 26 35 19 126 1 4	14 11 13 23 11 5	10 6 17 24 6 1	4 9 14 2 2 35	2 4 8 5	2	42 46 90 120 109 88 17 549	800	-15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TOTAL -35/-31 -30/-26 -25/-21			1 2 2 4 3 13	4	6 8 25 35 37 2 128	3	12 31 20 4 105 2 3 11	13 21 20 7 84	9 17 6 5	2 10 5 2 2 2 5	2	48 88 131 117 91 10 586 2 95
1000	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TOTAL -30/-26 -25/-21		3 2 8 1 18	1 1 2 2 7 11 3 28		4 4 7 13 27 39 22 6 122	8 5 22 30 27 12	13 3 16 16 15 6	2 8 9 14 18 2	2 2 10 9 10 1	5 6 8	2 1 3	25 45 46 90 131 116 78 12 549 22	1000	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TUTAL -35/-31 -30/-26 -25/-21		1 2 2 1 1	3 2 5 2 7 11 4 35	5 18 27 23 2 87	1	5 11 13 33 34 23 2 127	0 16 25 11 2 85 1	7 12 23 16 5	4 9 14 4 5	5 6 3	1 1	45 53 97 131 115 90 9 586 2
1200	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TOTAL -30/-26		2 3 4 7 2 20	3 2 8 9 2		2	9 8 23 34 24 5	6 5 18 19 19 1 76	8 8 13 17 2	1 2 11 12 6 2	3 6 6 6	1 1 2	45 51 109 128 123 56 9 549	1200	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 TOTAL -35/-31		1 3 3 1	6 3 6 14 1	8 13 19 20 21 2	1 4 4 11 38 34 17 1	12 12 38 32 15	31 31 6 1	8 4 19 15 11 3	/ 9 11 2 1	5 5 2 4 5 1	1	34 41 68 107 150 104 68 4 586
1400	-25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 TOTAL -30/-26		2 6 1 6 5 8 3	1 6 1 7 9	2 6 15 12 18 12	1 4 9 25 27 31 21 1	12 11 23 39 25 3	6 8 21 22 11 1 76	8 7 16 11 4	1 1 11 11 3 1	4 3 9 5	1 2 2	17 50 58 129 128 102 54 55		-30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		2 6 5 3 6 2	2 2 2 9 4 6 7 2	1 4 7 9 25 20 18	1 2 9 31 30 31 13	2 3 5 13 15 42 28 9	2 5 6 1 7 2 5 2 0 7 1	4 7 4 16 11 12 2	2 1 4 9 10 2	3 4 3 7 6	1 3 4 4 1	12 30 38 84 124 145 100 50 2
	-25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 TUTAL		1 6 1 5 3 10 8	1 33	3 6 7 17 11 17 7	115	6 9 14 34 33 18 3	6 16 27 18 11	2 5 8 9 13 4	1 1 11 12 6 1		1 1 2	21 48 75 140 126 92 40 1	1400	-35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9		3 4 7 5 5 4 3	1 2 4 7 6 9	2 4 6 9 13 21 14	1 3 12 29 34 29 5	1 4 6 18 29 35 22 5	4 4 6 24	3 6 7 11 18 8 2	1 3 3 12 8 3	2 5 5 6 5	3 1 1	1 11 30 45 102 135 142 88
ALTITUDE ABV SFC (METERS) SEASON: W	AIR TEMP INTERVAL (C) INTER (DJF	iCY (1)	F WF				FOR	. WIN	TER-	71ME 00 H	(GM <sup>-</sup>	100 %) T):	TOTAL DBS	ABV SFC (METERS)	TOTAL  AIR TEMP INTERVAL  (C) INTER (DJF	09 R E	19	29	81 30 39	49	50 59	69	70 79	89 T Y	90 99	<b>%</b> )	586 TOTAL D85
	1	2 258	3	49	4		9	57		TOTA 90	L				FREQUE	ICY D	F WE			ODE)	FDR		ITER-	-12 H	IR L		
			-				-									191					2	9		90	3		

# TABLE VI. - Continued

# (b) Spring

PERIOD:	JAN 1959-D	EC 1	96B											- 0							ELV	/: 6'	96 M	48	13N,	106	37 W
SEASON: ALTITUD ABV SFC (METERS		R	10	) 20	) 3(	0 41	5	) 6(	) 7	TIM T Y 0 80 9 89	90 1	6 }	OO HR TOTAL OBS	SEASON: ALTITUO ABV SFO (METERS	INTERVAL	RΕ	L 10 19	- 20	3 (	) 4	H U 0 50 9 59	) 6(	7 (	T Y	90	T); %)	12 HR TOTAL OBS
200	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 TOTAL -25/-21		3 7 7 2 2 21	7 36 7 15 1 10 2 2	11	2 1:	2 1 1 5 1 1 2 7 7 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 16	1 1			2	2 6 12 8 36 57 69 58 70 39 12 43 77	200	-35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TUTAL -30/-26				3 3 1 10	2	1 2 58	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 3 12 3 40 4 22 4 125	2 7 10 16 16 49 56 21 5	1 20 46 30 21	1 1 2 1	1 2 16 14 22 53 153 189 111 42 605 2
200	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34		1 4 6 5 3	22 31 9 6	15	2 3 3 3 1 1 1 6 7	16	2 2 2 2 2 9 9 1 18 10 10 3	1	1 2 3 0 3 1 8 5 3	1		9 7 97 75 65 71 65 18 9	400	-25/-21 -20/-16 -15/-11 -10/-6 -5/-6 0/-4 5/-9 10/-14 15/-19 20/-24 TOTAL -30/-26			1 3 4	11 8 1	32 20 11	1 1 2 3 2 5 4 14 9 33 2 33 0 11	19 34 29 14	21 44 20	3 16 36 30 20 5	3		11 13 12 41 105 173 153 66 28
400	TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29/ 29		19	1 8 24 15	1 2 14 23 28 12	1 2 2 5 4 10 18 14 1	12 12 22 10	2 2 4 13 15	,	2 2 4 3 4 6	2		373 7 10 7 18 45 77 73 78 37 15	600	-25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 TUTAL -30/-26		1 1 2	1 2 5 6 14 2 35	1 2 12 12 34 25 9	1 3 6 12 29 36 17 5 1	3 13 27 29 16 2	1 2 5 5 14 30 23 7	1 3 5 3 33 30 16 5 1	13 19 16 12 3	1 3 7 6	1	8 10 20 36 103 155 155 80 31 6
600	TOTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19 20/24		1 1 2 1 2	3 12 20 16 8	81 2 6 18 20 24 7	58 1 2 1 7 13 13 22 9	68 3 1 2 4 14 13 12 6 3	45 3 3 6 16 11 5	32 2 1 1 2 7 1 1 4	1 1 5	2		373 9 8 9 22 63 76 62 33		-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		2 1 3	1 3 8 6 10 15 1	18 18 40 21 6	1 2 5 19 37 44 10 7	2 1 4 7 21 26 28 13	4 3 8 20 28 16 3	2 7 11 25 23 11 5	2 2 14 14 9 7 1	1 3 6 5	1	10 19 54 112 154 152 65 29 205
800	25/ 29 TOTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		7 1 2 2	2 61 1 3 4 18 18 10	78 1 3 8 17 23 14 4	73 3 1 6 17 13 23 10 3	58 3 1 2 4 14 14 13 8	49 4 6 6 18 7 3 2	29 1 2 1 1 2 11 8 3	1	1 2		2 373 1 8 77 12 77 75 85 54 18	800	-30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		2 1 1 2 1 1 8	1 3 9 11 12 10 1	3 7 10 30 35 22 5 1	1 3 2 21 44 32 14 3	2 2 2 2 3 26 20 8	1 3 2 5 10 24 28 10 2	1 2 4 15 19 18 8 2	7 16 9 8 5 1	2 1 6 8 3	1	27 95 68 120 167 122 63 19 605
1000	20/ 24 25/ 29 TUTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		1 1 1 1 1	5 1 60 2 3 10 12 14	70 2 3 5 12 8 23 12 4	76 1 1 7 22 24 17 4	59 2 2 4 8 17 9 14 5	47 1 1 4 4 17 12 6 3	29 1 2 3 13 10 1	2 3 11	3 1 1		6 1 373 1 8 5 17 32 95 80 76 39 16	1200	-30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TUTAL -30/-26		2 1 3 1	1 2 2 6 13 11 13 8	3 18 26 25 14 6	3 8 28 47 30 9 2	1 2 3 3 14 27 31 18 4	2 2 1 7 13 32 29 8	1 2 8 12 14 15 8 1	1 2 17 9 10 2	1 3 6 4 3	1	3 6 9 32 75 141 175 105 42 16 1605
1200	20/ 24 TOTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		2 6 1 1 2	2 50 1 3 2 5 8 10 12 5	69 2 4 5 10 17 18 7 2	80 3 11 24 23 17 3	61 1 1 2 9 14 17 8 2	1 49 1 2 5 11 15 10 7	33 2 1 3 6 9 9	23 1 5 13 2	2 3 2 3		373 6 4 22 53 92 90 627 9	1400	-25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 TUTAL		2	1 3 2 6 11 13 10 5		1	3 4 12 42 38 17	20 19 23 6 82	1 2 7 13 17 12 10	1 8 13 11 6 1	1 4 3 4 3	3	4 6 9 44 88 154 169 89 32 9 15 605
1400	20/ 24 TDTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		1 1 1 1 1	46 1 1 3 5 4	65 2 4 6	82 4 11 25 19 11 4	1 1 7 7 13 22 6 2	52 1 2 1 2 15 13 18 4	36 2 2 4 10 15 3 2	23 1 3 10 7 4	1 2 2		1 373 3 6 7 28 66 89 101 47 19	ALTITUDE	-25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19 TOTAL	0 1	2 1 2 6	12 14 8 1 50	17 26 15 9 82 1	2 5 4 14 42 30 18 6	23 48 36 10 2	19 20 20 4 88	70	80	3 3 3 2 11 90 10	0 Tr	5 14 51 107 178 148 68 26 3
ABV SFC (METERS)	TOTAL AIR TEMP INTERVAL	RE	8 10 19	45	61 30 39	74 40 49 H	59 50 59 U M	60 69	1 T	89 Y	5 90 100 99 (%) (GMT):	ŧ	BS	ABV SFC (METERS)	INTERVAL OF (C) R (C) R (PRING (MAM)  FREQUENCY	9 1º E L DF 1	Δ :	29 T I	39 V E	49 H	59 U M	69 1 D	79 I T T NG-1	89 Y IME	99 (%) (GMT)	•	JBS
	FREQUENC	Y 0 F	WE A	THER	(C)	ODE)	FOR 9	SPRI B		OO HR TOTAL					39 22	3 4	48	548			5	57		920			
	20 4	74	53	114	ı			259		920																	

#### TABLE VI. - Continued

## (c) Summer

PERIOD:	JAN 1959-DE	C 19	68																	ELV:	696	м	48 1	3N, 1	06	37 W
SEASON: ALTITUDE ABV SFC (METERS)	SUMMER (JJA AIR TEMP INTERVAL (C)	RE	L 10 10	7 20 29	1 V E 30 39	40 49	50 59	60 69	I 1 70 79		(GMT) (%) 90 10 99		SEASON: ALTITUDE ABV SFC (METERS)	INTERVAL		L 4 10 19	T 1 20 29	30 39	40 49		1 D 60 69	I 1 70 79		( )	)	12 HR Total OBS
0	10/ 14 15/ 19			2	7	10	3	10	1	1	1	3 39	0	0/ 4 5/ 9				2	1	4	y	1 25	3 35	20		5 96
	20/ 24 25/ 29 30/ 34	1	5 14 51	23 57 57	22 48 20	18 18 8	9 2 1	6	2			85 139 138		10/ 14 15/ 19 20/ 24		1	1	15 5	14 29 7	40 58 5	52 48 5	61 48 5	79 30	59 14	ı	309 243 28
200	35/ 39 Total	3	21	5 144	97	54	16	16	7	3	1	29 433	200	TOTAL 5/ 9		1	ž	24	5 1 3	107 8	114	140	147	94	1	681 55
200	10/ 14 15/ 19 20/ 24		3	10 31	2 22 42	10 21	10 8	1 11 2	3 2 1	1		16 69 108		10/ 14 15/ 19 20/ 24			2 5 16	7 15 51	21 66 35	39 71 21	53 49 11	40 33 2	48 15 2	15	1	226 256 138
	25/ 29 30/ 34 35/ 39		24 41	80 29	3 4 6	17	5	_	-			160 76	/ 00	25/ 29 TOTAL			23	4	1	1140		89	75	21	1	6 681
400	TOTAL 5/ 9		75	150		51	28	14	6	3 1		4 433 2	400	0/ 4 5/ 9 10/ 14				2 15	5 30	4 46	13	7 39	6 2 <b>5</b>	3 9	2	1 40 199
	10/ 14 15/ 19 20/ 24		1	15 57	10 26 44	16 25	11 15 7	6 11 2	4	1		34 89 141		15/ 19 20/ 24 25/ 29		5	12 46 16	43 64 9	67 42 2	45 20	30	23	6			226 187 28
	25/ 29 30/ 34		24 19	73 7	2 4 2	12	2	2				137 28	600	TOTAL O/ 4		6	74	133	146		81	73 2	3 B 1	13	2	681 3
600	35/ 39 TOTAL 5/ 9		51	1 153	106	57 1	35 1	22	6	3		2 433 6		5/ 9 10/ 14 15/ 19		3	1 5 11	15 56	10 56 64	14 45 38	17 42 26	10 28 12	17 5	7	2	65 217 215
	10/ 14 15/ 19 20/ 24		5	16 66	10 39 49	13 28 24	10 21 8	7 9 4	5 3 1	2 1		51 117 157		20/ 24 25/ 29 Total		8 1	54 12 83	67	23	7	89	1				164 17
	25/ 29 30/ 34		21	54 1	14	5	1					95 7	800	0/ 4 5/ 9		12	3	144	2 11	23	l 23	53 2 14	30 5 6	1 1 10	Į.	681 11 93
800	TDTAL 5/ 9 10/ 14		32	141	20	71 8 18	41 1 12	23 5 17	9 5 6	5		433 21 83		10/ 14 15/ 19 20/ 24		4 15	8 27 59	29 58 40	67 65 11	49 33 4	38 16 3	22 5	10 2	3		226 210 132
	15/ 19 20/ 24 25/ 29		1 8 14	19 58 30	42 49	32 23 1	23	7	2	-		126 149 51	1000	25/ 29 TOTAL 07 4		1	8 105		156	109	81	43	23	14	1	681
1000	30/ 34 T⊡T∆L		1	2 114	-	82	43	33	13	5		3 433	1000	5/ 9 10/ 14			1 2 11	3 3 B	20 84	23 54	26 43	20 17	10 5	9 2	1	23 114 254
1000	0/ 4 5/ 9 10/ 14			1 5	3 19	5 31	9 17	10 19	2 6 2	1		2 35 97		15/ 19 20/ 24 25/ 29		5 10	34 49	65 26	57 2	26 2	1	3	2			199 90 1
	15/ 19 20/ 24 25/ 29		10 9	28 47 7	52 44	35 18	30 5	6	1	1		155 125	1200	707AL 0/ 4		15	9 ā	4	166	7	8.3 8	4 1 8	23 5	12	1	681 40
1200	30/ 34 TOTAL		21	1	119	1 90	61	36	11	6		18 1 433		5/ 9 10/ 14 15/ 19		8	11	8 49 66	30 73 46	37 52 22	38 34 3	22 13 1	9 2 1	12	1	164 234 194
1200	0/ 4 5/ 9 10/ 14			1	8 21	15 38	13 35	2 13 19	4 10 4	2		6 62 125		20/ 24 25/ 29 Total		5 1 14	25 90	16	1 156	119	83	44	17	14	1	48 1 681
	15/ 19 20/ 24 25/ 29		5 9	34 36 3	61 26	34 9	14 2	5	2			155 82	1400	-5/ -1 0/ 4 5/ 9				5	9	1 13	15	14	4	2		2 62
1400	TOTAL 0/ 4		14	78	116	96 4	64 5	39 2	20 6	6 1		433 18		10/ 14 15/ 19		1 3 13	5 12 50	17 59 50	45 70 33	50 54 7	42 20 3	28 13 1	14	6	1	209 232 158
	10/ 14 15/ 19		8	2 9 26	10 24 64	22 39 36	10 40 16	24 18 4	10	2	1	82 138 154		20/ 24 25/ 29 Total		118	13	135	157	125	80	56	20	9	1	17 1 681
	20/ 24 25/ 29 Tûtal		3 11	25 1	8 1 107	3	71	48	2 <b>2</b>	6	1	39 2 433	ALTITUDE ABV SFC	AIR TEMP	00 09	10	20	30 39	40	50	60	70	80	90 l	-	TOTAL
ALTITUDE	AIR TEMP	00	10	20	30 39	40	50	60	70	80	90 100	D TOTAL	(METERS)	(C) SUMMER (JJA	RE		. Ť 1	. V E		59 H U M	69 I D	79 [ ]		99 (7 (GMT		OBS 12 HR
(METERS)	SUMMER (JJA	RE			V E		59 U M	69 I D			99 (%) (GMT)	085 : 00 HR		FREQUEN	ic Y o	F WE	ATHE	R (c	ODE	) FOR	SUM	MER-	·12 H	IR		
	ERECUEN	ru =	<b>-</b> ./-								_			1	2	3	3	4		9	В		TOTA	L		
	FREQUEN 1	2	F WE	ATHE	K (C	ODE)	FOR 9	SUM B		TOTA				29	189	18	62	6		3	55		92	0		

27

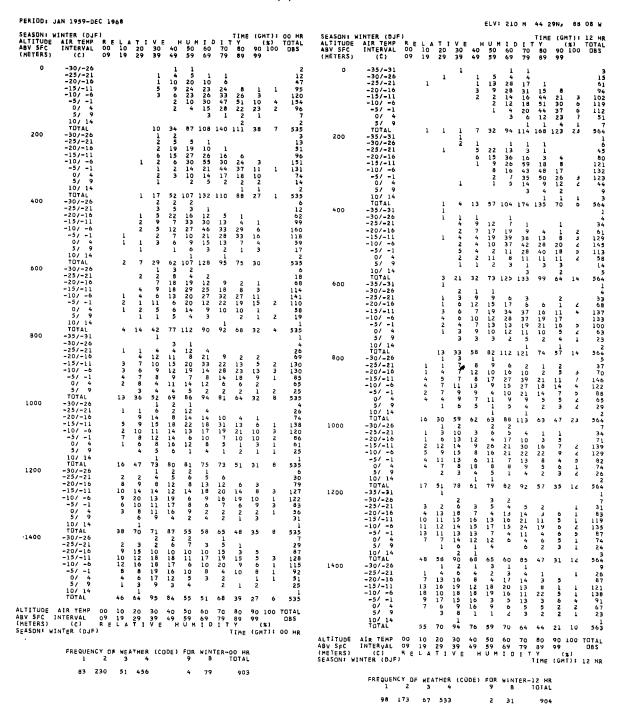
#### TABLE VI. - Concluded

# (d) Fall

	JAN 1959-DE		8										-a 4a	<b>55.</b> 5-W								ELV	: 69	96 M		13N <i>&gt;</i>	_	
SEASON: ALTITUD ABV SFC (METERS	E AIR TEMP Interval	R E	10	T 1 20 29	7 30 39	40	50 59		D I 70 79	T Y 80		¥)	OO HR TOTAL OBS	SEASON: ALTITUI ABV SFO (METERS	E AIR TE	SON) MP	R E 1	L A 10 19	T I 20 29	V E 30 39	40 49	H U 50 59	M I 60	D I 70 79	T Y	90	100 *)	12 HR TOTAL OBS
200	-20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19 20/24 25/29 30/34 TUTAL		1 8 13 6 28	4 7 23 29 25 4	1 3 11 26 34 18 9 1	1 1 11 17 24 14 9 2	3 1 4 14 21 10 6 3	12 6 1	1 3 8 9 8 6 3 1	2 4 7	3 5 2		7 6 13 27 68 71 78 80 67 49 11 477	200	-30/- -25/- -20/- -15/- -5/ 0/ 5/ 10/ 15/ TOTA -30/- -25/-	21 16 11 -6 -1 4 9 14 19 L			1	1 3 1 3 8	1 6 6 18 1 32	27 37 20 6	1 2 3 3 3 3 1 0 2 117 1	10 27 36 33 8 7	9 22 54 43 29 12	1 14 19 33 13	1 1 3	1 4 8 15 50 130 185 159 82 21 655
400	-15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 25/-29 30/-34 TUTAL -25/-21	,	7 12 3	1 6 11 26 30 17 1	1 6 20 39 36 19 2	1 1 5 16 23 19 11 4	1 11 13 17 10 5	9 18 13 2 1	3 5 8 6 3	2 2 5 6 2	1 1 1 1 4		11 7 37 69 86 79 61 31 477	400	-20/- -15/- -10/ -5/ 0/ 5/ 10/ 15/ 20/- -25/-	11 -6 -1 4 9 14 19 24 L		1	1 6 7	10 16 15 3 44	3 17 37 42 21 6 126	10	28 36 34 20 7 21 136	6 9 18 29 30	8 8 1 76	1 2 8 9 3 5		5 14 26 938 138 1634 655 1 155 1
	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 TOTAL		7 9 1	2 4 20 25 28 7	4 12 24 37 36 12 1	1 5 13 29 20 12 4	1 5 13 20 23 6 3 1	3 4 11 11 9 2 1	1 3 3 11 9 6 2	1 4 2 2	1 1 1	1	5 12 89 69 96 89 78 52 17 477	600	10/ 15/ 20/ 25/ TOTAL	11 -6 -1 -9 14 19 24 29		1 3 1	13 14	3 14 18 29 25 6	1 27 48 39 22 6	27	1 3 5 14 22 27 17 4		1 9 16 16 6 6	3 1 3 7 1 1	1 1	2 13 27 66 140 157 137 79 31 655
600	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 TOTAL	1	3 0 4	1 5 14 26 15 5	2 8 10 21 33 31 11	2 1 10 17 39 23 15 2	2 2 10 15 25 8 4	1 1 2 17 14 7 2 1	1 7 8 7 1	2 1 6 1 2 1	1 2 1	1	1 7 8 14 55 74 107 84 80 38 9		-25/-2 -20/-1 -15/-1 -10/-1 -5/-2 10/-1 15/-1 20/-2 25/-2	16 11 -6 1 4 9 4 9 4 9 4 9 9 4 9 9 4 9 9 4 9		3 : 6 : 1	8 17 13 12	6	1 34 48 41 16 6	7 13 30 33 23 7 1	1 2 5 12 20 28 8 2	4 6 16 14 14 5	1 2 4 16 10 5 4	2 2 4 8 3	1 1 2	1 2 11 26 79 142 164 130 67 31
800	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		5 8 1	5 7 14 26 11 3	1 3 7 14 20 36 30 3		2 15 23 20 4 2	1 2 1 7 17 8 5 1	1 5 14 2 5 1	1 4 3 8 1	1 2 2 1 1	1	1 7 7 24 64 88 93 91 75 23 477	800	5/ 10/ 1 15/ 1 20/ 2 25/ 2	16161494949		2 1 5 1 7 1 8	8 8 8	23 31 35 20 5	1 18 40 40 32 16	1 1 7 16 27 36 20 2	2 3 17 19 22 4 2	5 4 15 13 9 1	1 4 5 15 9 8	2 1 5 5 3	1 1 2	1 1 2 14 27 101 143 161 116 65 22
1000	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		4 : 3 :	29 7	1 5 10 16 24 37 21 1		1 1 13 30 17 7 1	1 2 4 10 19 6 3	2 6 13 8 2 1	1 1 2 6 4 1	1 1 1 2	1	2 5 8 27 74 107 90 62 11 1477	1000	TOTAL -30/-2 -25/-2 -20/-1 -15/-1 -10/5/ 10/ 1 15/ 1 20/ 2	6 1 6 1 6 1 6 1 4 9 4 9 4	11	3 3 1 5 1 1 1	3 4 6	1 2 13 25 24 30 16	7 30 33 42 33 8	2 6 24 41 35 20 2	71 5 3 14 21 15 5	1 1 6 22 7 9	1 3 9 8 7 5	2 8 5 2	1 1 2	655 1 1 3 1 4 0 5 1 4 9 1 0 9 1 4 9 1 5 3 1 4
1200	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TUTAL -25/-21	:	4 3 5 2 2	5 10 18 20 7	9	26 27 24 6	8 11 35 15 10	1 2 1 4 15 15 4	2 7 9 12 4 3	3 1 7 1	1 1 1	1 1	2 4 11 49 109 109 192 40 47 47 47 72	1200	TOTAL -30/-22 -25/-2 -20/-1 -15/-1 -10/ - -5/ - 0/ 5/ 10/ 1	6 1 6 1 6 1 4 9	29 3 4 2 5 10	1 1 1	6 2 2 2 8 3 7 1	1 4 11 15 14 11 12	1 6 31 34	5 7 34	1 1 9 19 22 16 4	1 3 8 17 10 5	1 4 7 8 7 5	17 1 9 8 1	1	655 1 3 16 50 140 151 147 96
ALTITUDE	-20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 TUTAL	10 10 10 10 10 10 10 10 10 10 10 10 10 1	3 5 5 2 5 1 1 6 6	8 1 8 1	2 10 8 27 27 27 2 80 1	18 24 25 22 1	1 2 10 15 32 16 6 1 83			3 5 8 3 1 20	1 1 2 90 10		3 11 55 86 110 94 86 28 2 477	1400	20/ 2 TUTAL -30/-21 -25/-2 -20/-11 -15/-1 -10/ -4 5/ 5 10/ 14 15/ 15 20/ 24	5	2 31 6 4 2 7 7 7	1:1:	1 5 8 1 9 1 0 3 9 2	0 1 9 6 0 1 5 1	4 12 34 41 30 18	1 11 41 34 37 8	72 1 4 12 23 23 16 1	1 2 11 19 8 6	5 4 11 9	1 1 8 4 2	1 2 1	55. 655. 2 2 22. 65 160 150 137 78 35
(METERS)	(C) R FALL (SON)	LEL	AT	I	VE	н	UM	ID	ΙŤ	IME	99 (%) (GMT)		085 0 HR	ABV SFC (METERS)	TÖTAL AIR TEMP Interval (C)	. 09 R	35 10 19 E L	20	3	9 4	9	50 59	60 69	79 I T	80 89 Y	16 90 10 99 (%)	0	BS
	FREQUENCY 1 22 39	2	3	HER 4 201		IDE 1	9	FALL B 276		O HR				SEASONII	FREQUE		DE U	= <b>∆</b> T∺	FR	(¢¤n	E) I	FOR 1	FALL		IME 2 HR	(GMT)	• 12	нқ
	-2 27	. •	-	-01											1	196	3	3	19		'	1	36		910			

# TABLE VII. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR GREEN BAY, WISCONSIN

#### (a) Winter



## TABLE VII. - Continued

# (b) Spring

PERIODI .	JAN 1959-DE	C 10																		ELV	1 510		44 2	9N/		98 W
SEASONI S ALTITUDE ABV SFC (METERS)	SPRING (MAP AIR TEMP INTERVAL (C)		L A	7 2 20 29	7 E	40 49	50 50 59	J D	1 7	7 I ME 80 89	(SMT) (%) 90 100	TOTAL	SEASON1 ALT; TUDE ABV SFC (METERS)	SPRING (MAP AIR TEMP Interval (C)	R E 00 09	10 19	7 1 20 29	7 E	40 49	1 U I 50 59	4 I C	7 <sub>0</sub>		( )	00	12 HR Total Des
200	-20/-16 -15/-11 -10/-6 -5/-1 5/-9 10/-14 15/-19 20/-24 25/-29 TUTAL -25/-21	1		1 4 3 2 2 12	1 6 5 16 17 6 1	2 2 5 6 7 17 20 16 6 2 85 1	12 18 20 12 16 7 3	12 24 14 12 11 4	6 11 25 20 12 10 1 2 87	15 10 11 5 2	9 3 4 4 4 1 22 3	91 91 82 29 11 487	0	-35/-31 -30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-9 10/-14 15/-19 20/-24				1	3 3	1 2 6 2 2	1 1 2 4 1 4 1 5 9 8 1	12 37 42 21 17 6	1 5 14 15 15 6 43 19 14 2	5 11 28 40 35 25 5	1 1 2 4 1 2 3 3	1 15 15 35 52 137 186 128 77 28
	-20/-16 -15/-11 -10/-6 -5/-1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 TOTAL			3 5 4 3	1 5 6 9 18 16 1	3 8 12 14 31 16 18 3 109	10 15 18 13 14 13 3 2 88	1 6 16 25 15 10 5 4 1 83	2 15 20 17 11 10 1	2 12 8 7 8 4 1	5 1 5 4 1	1 5 28 75 97 100 86 71 16 7	200	TUTAL -30/-26 -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14				1 2	7 1 3 4 5 15 4 2	17 1 2 9 6 12 24 30 17 6	5 7 14 32 33 34 24	1 12 18 33 48 21 24	236 3 13 37 31 21 11 8	1 6 18 19 16	1 1	55 126 160 142 96
400	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		1	1 1 1 2 6 5 2	1 4 2 7 9 12 19 12 2	1 3 13 19 16 32 17 14 3	2 13 13 20 8 13 8	1 6 18 22 14 10 8 4	1 4 22 11 8 9 8	1 10 6 9 5	1 2 5 1 5	91 83 59 13 2	400	20/ 24 TUTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		1	2 1 2 6 6 5	3 1 2 1 7 10 18 14 10	5 10 10 23 26 17 5	5 8 10 24 18 24 15 6	159 1 16 25 27 20 15	1 5 19 27 27 11 9	124 6 22 19 17 14 7	1 6 11 15 7	1 3	9 669 1 7 27 65 123 140 137 99 55
600	TOTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-9 10/-14 15/-9 20/-24		1	19	3 4 12 12 18 18	119 2 4 20 12 19 19 18 8	78 13 10 19 21 17 15 6	1 9 16 13 12 11 6	1 5 22 12 15 7 6	3 12 9 8 2 3	1 1 1 6 1 4 1 6	1 13 53 96	600	20/24 TUTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14		1	3 2 2 9 6 2	65 1 4 9 13 16 20 13	97 26 7 20 24 30 23	2 10 9 18 23 20 11	125 2 11 22 2/ 21 14 14	2 13 25 19 10 6	2 8 19 16 9 13	7 12 14 6	1 2 1	15 669 1 6 35 71 131 134 133 94
800	TOTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24		1 1 2 3	3 3 3 3 3 2	1 4 9 7 12 16 18 6	104 2 10 12 10 18 23 14 6	2 3 15 17 25 12 11	71 2 12 10 14 9 12 4	3 8 23 6 17 8	1 6 13 9 6 4	2 3 1 4 3 5	1 54 64 91 97 93 75 29	800	20/ 24 TQTAL -25/=21 -20/=16 -15/=11 -10/ =6 -5/ =1 0/ 4 5/ 9 10/ 14 15/ 19		3 2 1 1 2	1 5 6 6 11 8 5	2 B 1 7 20 21 17 7 .	10 10 13 26 29 10	105 4 6 16 17 18 19 12 6	128 2 10 17 19 17 16 11	25 15 16 19 8 5	1 12 17 19 13 16	1 1 1 1 1 2	1 1 9	11 38 89 118 133 132 89
1000	TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		2 2 4 4	21 1 2 7 2 5 2 1	70 1 4 6 11 8 22 12 3	97 2 9 10 15 22 18 13	91 2 5 12 16 16 15 11 6 2	66 6 13 14 17 7 9 4	71 1 14 11 14 9 10 8	2 8 11 4 10 3	16 7 1 1 6 1 5 2 4 2	98 92 64 25	1000	20/24 TUTAL -25/-21 -20/-16 -13/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 13/ 19		1 3 4 2 4 1	3 1 10 13 16 7 2	13 14 20 13 13 5	109 100 100 100 100 100 100 100 100 100	99 1 17 13 17 25 11 6	106 10 17 17 19 10 10	79 23 19 21 11 14 9	78 8 9 22 3 13	38 3 7 7 12 3	4	992889807180212542802
1200	TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL		13 2 5 6 1 1	27 6 4 8 5 8 3 1 35	68 1 4 5 7 16 14 13 61	92 12 8 14 17 17 8 2	85 13 5 8 14 15 14 3 4 67	71 6 12 22 12 15 8 5	68 1 4 11 9 5 17 10 3	2 17 5 15 4 4	19 6 1 3 1 4 2 7 1 6 2 2 1 23 7	3 11 42 74 91 99 98 53 16	1200	20/ 24 TUTAL -23/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		15 4 7 11 7 5 2	57 1 3 7 8 10 14 6 2	3 5 21 14 16 12 13	3 4 8 21 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8	1 6 10 18 19 23 22 10	95 1 2 11 11 19 8 12 9	20 17 14 10 11 8	62 10 10 10 10 11 11 11	1 3 6 11 7	1 2 2 4	19 45 108 127 141 122 75 27
1400	-25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL		1 3 4 5 8 6 3 1	1 5 8 4 8 4 1 37	1 2 3 9 14 14 15 9	2 9 11 17 16 11 6	1 3 7 6 16 19 10 5 70	2 8 10 17 10 16 3 5	1 7 13 9 11 13 11 16	3 12 3 11 9 3	2 7 5 1 8 2 3 2 1	3 14 49 78 98 101 90 43 11 487	1400	TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL		36 1 1 4 7 10 9 6 2	57 5 15 8 17 9 7	16 15 21 10	11 13 22 20 22 5	2	81 2 3 4 7 18 13 7 11 9 78	2 2 24 12 13 13 16 3	10 10 10 7	2 1 3 7 7 2	10	069 21 54 113 132 144 118 05 17
ALTITUDE ABV SFC (METERS) SEASON: S	AIR TEMP INTERVAL (C) PRING (MAM	)		T I	VE	н	им	60 69 I D	1 1	89 Y T1ME	90 100 99 (%) (GMT):	085	ABV SFC (MeTers)	AIR TEMP INTERVAL (C) PRING (MAM	RE	10 19 L A	20 29 T t	30 39 V E	40 49 H	50 59 U M	60 69 1 D	: T	Y	90 11 99 (% (GMT	, '	085
	FREQUEN	CY 0	F W.F	ATHE	R (C	ODE)	FOR 9	SPR B	ING-	DO HE				FREQUENC	CY OF	WE A	THE	R (CC	i0€)	POR 9	SPR.	ING-	12 HA	t ·		
	31	342	57	21	0		3	277		920	)			54	138	55	59	5		4	74		920	)		

## TABLE VII. - Continued

# (c) Summer

PERIOD: JAN 1959-DEC	1968	ELV: 210 M 44 29N, 88 08 W
ABV SFC INTERVAL	TIME (GMT): 00 HR RELATIVE HUMIDITY (1) TOTAL 100 10 20 30 40 50 60 70 80 90 100 OBS 19 19 29 39 49 59 69 79 89 99	SEASON: SUMMER (JJA)  ALTITUDE AIR TEMP R E L A T I V E H U H I D I T Y (\$) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99
0 10/14 15/19 20/24 25/29 30/34 TOTAL	2 3 1 6 12 1 16 24 13 13 18 1 1 89 23 57 69 46 53 25 7 280 25 48 68 54 35 3 23 2 8 22 3 35 51 131 185 119 102 52 8 1 649	0 0/4 3 6 9 5/9 1 13 40 39 # 101 10/14 1 1 / 26 113 126 11 285 15/19 9 31 122 140 19 321 20/24 1 1 5 11 29 34 / 88 25/5/29 1 1 5 11 29 34 / 88
200 10/14 15/19 20/24 25/29 30/34	1 6 9 4 6 1 27 14 34 43 24 24 18 6 163 1 27 73 81 54 45 17 5 303 12 27 43 45 19 146 1 3 4 2 10	TÜTAL 1 1 2 22 82 307 345 45 805 200 5/9 1 5 15 17 12 2 52 10/14 1 19 46 82 62 28 236 15/19 5 14 68 120 96 64 367 20/24 1 1 11 37 37 43 13 143
TOTAL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34	1 54 138 177 134 92 41 12 649 1 1 2 1 5 3 17 19 12 10 8 4 73 2 15 56 62 43 29 19 8 734 4 17 54 74 59 41 17 2 268 6 16 14 26 5 67 1 1 1 2	25/ 29 1 1 3 5 TOTAL 1 2 6 49 167 257 216 107 805 400 0/ 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TOTAL 600 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	6 41 144 171 140 86 46 15 649  1 4 1 1 4 2 13  2 11 21 39 16 10 9 5 113  2 12 50 87 59 39 26 10 285  1 11 33 59 65 32 9 1 211  4 5 4 11 3 27	207 29 1 2 3 4 2 3 15 TOTAL 2 11 26 88 163 149 171 127 65 3 805 600 0/ 4 2 2 2 2 2 2 5/ 9 5 8 9 8 12 10 5 57 10/ 14 1 1 12 29 46 49 39 33 17 1 228 15/ 19 5 10 33 93 83 64 57 15 1 361
TOTAL 800 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	5 38 110 193 152 85 48 18 649 1 2 8 6 1 3 2 1 24 3 10 29 51 41 22 14 8 1 179 4 10 37 75 80 48 30 11 295 2 7 18 28 64 22 3 144 1 2 2 2 7	20/24 2 7 20 38 30 35 18 2 152 25/29 2 2 5 TOTAL 1 8 34 91 186 172 154 118 39 2 805 0/4 1 1 1 2 6 81 5/9 5 14 18 15 11 12 6 81 10/14 1 5 10 36 57 64 42 35 20 1 271
TOTAL 1000 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	11 27 88 164 193 93 50 21 2 649 2 9 12 12 6 4 4 1 50 5 14 28 64 63 37 14 8 1 234 2 3 9 29 70 88 45 29 6 281 1 4 11 15 32 14 2 79	15/ 19
25/ 29 TOTAL 1200	1 1 2 4 10 27 78 163 196 102 49 18 2 649 1 1 3 1 3 8 1 1 3 8 1 1 5 1 6 102 1 1 8 1 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1	10/ 14 3 4 17 32 75 79 53 39 18 2 322 15/ 19 3 13 33 68 64 69 32 6 288 20/ 24 2 2 7 8 16 12 10 4 1 62 25/ 29 1 1 20 170TAL 5 9 47 95 186 184 153 90 34 2 805 1200 -5/ -1 1 1 200
20/ 24 TOTAL 1400	4 5 4 9 12 3 3 1 649 8 18 39 64 134 181 134 47 23 1 649 1 2 4 5 1 3 16 6 6 11 15 22 42 24 7 4 1 138 7 9 9 21 50 83 73 24 14 1 291 6 4 11 23 38 51 31 16 1 181 2 3 2 3 6 6 1 23 21 22 33 63 18 186 134 48 22 2 649	0/4 4 3 2 4 4 5 22 5/9 2 5 11 20 36 41 27 16 6 164 10/14 4 9 16 34 63 88 71 34 20 2 341 15/19 1 6 15 24 50 57 56 31 2 242 20/24 2 2 6 5 7 2 7 2 2 35 TUTAL 9 22 48 87 160 190 165 87 35 2 805 1400 -5/-1 1 1 2 0/4 2 5 6 8 6 7 4 38
ALTITUDE AIR TEMP	00 10 20 30 40 50 60 70 80 90 100 TOTAL 19 19 29 39 49 59 69 79 89 99 DBS LELATIVE HUMIDITY (%) TIME (GMT): 00 MR	5/ 9 6 8 15 30 42 49 40 20 8 218 10/14 10 10 17 35 61 93 74 48 13 1 362 15/19 2 8 17 16 28 32 45 15 4 167 20/24 2 4 4 3 1 50 15/10 10 10/10 10 10 10 10 10 10 10 10 10 10 10 10 1
FREQUENC 1 29 2:	OF MEATHER (CODE) FOR SUMMER-OO HR 2 3 4 9 8 TOTAL 27 14 128 1 521 920	ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 IBS (METERS) (C) RELATIVE HUMIDITY (%) SEASONI SUMMER (JJA)
		FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR 1 2 3 4 9 B TOTAL
		52 46 12 723 5 82 920

# TABLE VII. - Concluded

# (d) Fall

PERIOD: JAN 1959-DEC 1968												. ELV: 210 M 44 29N, 88 08									08 W					
SEASON: F ALTITUDE ABV SFC (METERS)	ALL (SOM AIR TEMP INTERVAL (C.)	R F L 00 1 09 1	A T O 20 9 29	I V :	E 10 49	H U 1 50 59	M I D 60	1 7	· Y	- (	%)	OO HR TOTAL OBS	SEASON: ALTITUDE ABV SFC (METERS)	AIR TEMP Interval	RF	L 10 19	20	I V I 30 39	40 49	H U 50 59	M I D 60	70 70 79	T I ME T Y 80 89	90 99	<b>x</b> )	12 HR TOTAL OBS
0	-15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34		1	5 2 1	2 7 8 17 19 15 6	7 13 22 24 25 26	20 4 1	1 5 26 25 20 20 19	1 7 17 18 20 14 14	1 6 10 12 11 3	1 1 1	1 38 101 111 129 120 98 18	200	-15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 707AL -20/-16					1	1 1 2	3 10 9 8 6		2 20 44 63 63 38 20 7 257	5 27 55 55 59 30 6 237	3 17 25 / 10	8 30 115 173 172 124 67 13 702
200	TOTAL -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		1	1 6 6 1 1	4 9 17 22 23 15	121 2 13 19 33 33 29 20	20 30 19 26 20 17	120 10 26 20 25 21 10	92 11 15 16 16 11	1 6 6 13 6 1	3	621 7 58 101 112 141 121 75		-15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL					1 1 2 1	1 5 9 8 3 6	15 22 30 22 7 2	56 47 54 58 24 6 255	6 30 43 58 31 27 8 203	4 11 21 30 29 4	1 1 2	9 16 111 133 174 145 93 20 702
400	TOTAL -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 25/-29		1 3 2 1 1	1 2 7	91 5 12 27 30 30	150 6 13 16 29 27 16 18	139 14 26 30 15 18 23	1 13 14 23 27 17 6	78 11 16 15 17 14 8	33 4 4 4 11 8	1 1 1	621 12 74 95 123 141 114 57	400	-20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19 20/24			1 1	2 1 10 5 2	1 8 14 6 13	1 4 14 16 20 26 22 4	3 7 20 21 31 33 25 4	2 9 34 42 36 16 16	1 5 16 29 34 27 18 12	8 14 9 23 13	1	2 8 26 95 132 154 137 110 36
600	TOTAL -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 17 20/ 24 25/ 29	1	1	1 1 4	118 5 8 11 20 26 21	126 1 6 10 29 25 27 35 8	127 : 1 7 20 23 26 21 20 4	8 17 9 23 20 20	81 2 15 12 13 18 17	31 7 5 5 10 7	2 2	621 2 31 80 93 126 135 125 26	600	TOTAL -20/-16 -15/-11 -10/-6 -5/-9 10/14 15/19 20/24			2 5 1 1 1	21 2 4 8 7 4	45 1 4 4 8 19 12 9	109 1 1 3 17 17 29 33 23 2	146 1 5 6 19 30 29 27 21	166 2 14 34 27 32 22 20 8	142 6 16 26 28 22 12	70 1 2 10 11 8 17 12 3	1	702 2 10 35 104 124 158 141 102 26
800	TOTAL -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL	1 1 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 12 1 7 3 2 4 1 1	1 4 2 7 11 5	1 4 12 22 22 10 2	141 3 13 25 27 21 26 1	123 1 3 9 20 17 26 24 16	105 20 19 21 27 18 4	8 18 13 17 14 20	35 2 11 3 4 12 6	3 2 2	621 5 40 93 101 131 137 103 11 621	800	TOTAL -20/-16 -15/-11 -10/-6 -5/-9 10/ 14 15/ 19 20/ 24		2 2 3 3	10	25 3 2 6 13 9	57 2 11 9 12 18 9		145 1 3 13 20 24 33 19 20			64 2 4 8 11 9 16 9	1 2 1	702 3 12 55 103 129 157 132 87
1000	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	2 3 6 2 1	1 4 4 2 6 2 6 2	1 3 5 8 10 10 5	5 7 18 21 17 8	2 3 17 27 31 29 17 17	1 2 8 8 23 28 20 13	1 15 19 18 21 24	17	1 6 8 5 11 5	1 1 2	1 8 55 80 118 139 131 81 8	1000	TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		3 2 8 3	2 2 6 9 3 4	1 10 8 10 9	62 1 4 2 7 19 15 22 10	114 2 9 17 24 34 23 10	142 1 2 4 17 18 31 30 28 16		108 1 14 16 14 25 15 15	62 4 6 8 12 2	2	702 4 16 61 140 160 133 74
1200	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	2 6 7 5 3	1 2 7 13 11 15 3	4 6 13 11 15 4 2 55	5 7 14 21 11 9	1 5 11 22 23 17 6	1 5 9 18 23 25	1 13 21 19 21 20 8	6 10 13 11 17 18	4 7 8 5 4 13 2	3 1 2	1 16 56 89 122 138 137 55 7	1200	TOTAL -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24		17	26 3 11 16 7 14 3	42 1 2 12 18 18 10 4		122 2 6 10 23 28 18 3	148 1 8 9 20 27 26	121 6 21 12 26 20 25	103 8 15 11 22 22	40 1 3 8 5 7 9 7 2	2	702 27 65 99 149 157 148 48
1400	TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL	24 1 3 6 14 10 15 3 1	4 9 9 9	5 7 14 15 9 8	1 7 10 16 21 14 7	1 6 14 23 22 16 4	1 5 11 18 15 20	3 11 19 20 21 24 7	1 4 13 12 9 14 21	7 6 6 3 4 10	4 1 2 7	22 20 64 94 127 133 140 39 2	1400	TOTAL -20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24		25 1 2 6 12 20 12 1	54 1 5 14 13 8 12 2	65 1 2 6 10 16 15 10 4	78 1 3 4 12 21 19 18 2	91 3 10 18 25 29 18 2	2 5 15 23 19 27 15 11	8 11 11 25 20 25 7	95 4 15 12 10 16 22 5	42 1 5 7 3 8 4 2	1 1	702 5 28 74 113 145 163 136 36
ALTITUDE ABV SFC 1 (METERS) SEASON: FA	(NTERVAL (C) ALL (SON)		29 A T 1	VE			I D	79 I T	B9 Y IME	99 (%	)	TOTAL OBS DO HR	ALTITUDE ABV SFC (METERS) SEASON! F	(C)	00 09 R E	55 10 19 L A	55 20 29 T I	30 39 V E	40 49	50 59	60	70 79 1 T	89 Y	31 90 1 99 (% (GMT	, '	DBS
	FREQUENO 1	Y 0F W	FATHE 3	R (C)	DDE)	FOR 9	FALL B		O HR					FREQUENC	2 OF	WE A	THE	R (CC	DE)	FOR	FALL B	-1 T	2 HR			
	54	94 3	4 34	17		7	274		910						110	37	596	\$		7	106		910			

# TABLE VIII. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR COLUMBIA, MISSOURI

#### (a) Winter

SON: WI ITUDE SFC TERS)	INTER (DJF AIR TEMP INTERVAL (C)		L A 10 19	T I 20 29	V E 30 39	40 49	U M 50 59	I D 60 69	1 1	9 M1 T	- (1	<b>6</b> 1	OO HR TOTAL OBS	SEASONI W ALTITUDE ABV SFC (METERS)	INTER (DJF AIR TEMP INTERVAL (C)	R E DU 09	L A 10 19	T 1 20 29	V E 30 39	40 49	U M 50 57	1 D	1 70 79	1 I M	90 99	1) 1	12 101 01
0	-20/-16 -15/-11				1	4	3	1 7	2				5 19	0	-25/-21 -20/-16 -15/-11					ı	1 3 5	٠	7 14 23	1 6 31			
	-10/ -6 -5/ -1				7	11	26	18	24	11	6	1	112		-10/ -6					2	7	11 15 13	32	43 63	11 30		1
	0/ 4 5/ 9			3	10	14 19	28	35 26	27	12	15 5	2	147		-5/ -1 0/ 4 5/ 9				1	3	117	21	38 23 7	30	23	•	i
	10/ 14 15/ 19			2	13	10	16 3	9 5	1	8 1	1		65 21		10/ 14				1	2	,	2	í	6	7	•	
	20/ 24 TDTAL			11	57	3 80	121	123	75	47	28	3	5 545		15/ 19 TOTAL -25/-21				2	8	41			190	89	15	
200	-20/-16 -15/-11				1	1 5	7	7	1				6 21	200	-20/-16					1	6	13	7				
-10/ -5/	-10/ -6 -5/ -1			2	7 8	10 17	23 29	20 23	6 27	8 11	8		75 125		-15/-11 -10/ -6					5	10	27	28 30	17 25	4		
	0/ 4 5/ 9			5	11	19 26	22	29 19	17 11	12	13		128 112		-5/ -1 0/ 4				2	5 9	17 20	27 28	30 31	34 22	16 12		
	10/ 14			3	12	8	13	6 2	7 1	9 1	1		58 16		5/ 9 10/ 14				1	8	9 2	12	12	12	14		
	20/ 24 Total			14	59	2 92	128	108	70	49	25		4 545		15/ 19 Tutal				4	32	79	127	144	1 119	56		
400	-20/-16 -15/-11			•	5	6	4	12	2		1		10	400	-25/-21 -20/-16					1	10	5	3				
	-10/ -6 -5/ -1			3	7	14	28 32	15	17	5 18	4 8		90 129		-15/-11 -10/ -6			1	4 5	5 13	13	20	15 22	8 13	8		
	0/ 4		1	10	12	24	15	22	10	7 B	11	1	104		-5/ -1 0/ 4			ī	12	19	26 20	17	15	30 10	14		
	10/ 14 15/ 19		1	7	11	9	6	6 2	7	6	4		56 15		5/ 9 10/ 14			4	12	11	22	13	9	10	10	1	
	20/ 24 TOTAL		2	23		2	108	92	71	44	32	1	2 545		15/ 19 TOTAL			10	40	1	111	108	93	80	49	٠	
<b>6</b> 00	-25/-21 -20/-16		•	.,	,	1	1	3		•		•	13	600	-25/=21 -20/-16				1	6	2 7	4	1				
	-13/-11			2	12	12	14	21		1 7	1 3		39 91		-15/-11 -10/ -6		2	1	6	23	11	15	8	5 12	3 6		
•9/	-10/ -6 -3/ -1			ī	19	21	13	22	27	14	•		127		-5/ -1			5	16	17	17	16	25	19	12		
	3/ 9		,	9	17	25	21	11	10 7 7	9	3	1	104		0/ 4 3/ 9 10/ 14		1	4	13	18	18	iż	8	10	5 7 6	2	
	10/ 14		1	6	11	4	,	2	- '	1	4		12		15/ 19 TOTAL		3	24	72		102	95	67	62	37	z	
	20/ 24 101AL		7	21	84	127	97	87	67	46	22	2	545	800	-25/-21		•			3	3	1	01	02	,,	•	
■00	-25/-21 -20/-16				3		ž	. 1	1	_			12		-20/-16 -15/-11 -10/ -6		1	6	11	22	16	5	11	6	*	1	
	-15/-11 -10/ -6			10	16	12	13	12	12	6	1 9 7		90 89		-5/ -1		3	13	20	14	18	1 i 1 b	14	14	11	•	
	-5/ -1 0/ 4		1 2 7	14	23	21	16	13	19	16	6	Z	130		5/ 9		5	12	17	15	17 13	12	5	12	•	4	
	5/ 9 10/ 14		3	13	19	19	12	10	3	11	2	1	102		10/14		1	3	2	91	ī	97	2 57	19	1		
	15/ 19 Tutal		13	60	101	90	77	66	53	52	29	4	545	1000	TUTAL -25/-21		12	68	4.	1	3			,,,	,•	•	
000	-20/-16 -15/-11		2	4	10	9	6	9	7	2	1	ì	13		-20/-16 -15/-11		5	. 7	į	7	6	1 3	12	, ,	3	1	
	-10/ -6 -5/ -1		7	11	8 27	17 12	12	12 17	10 15	11	5 9	1	94 125		-10/ -6 -5/ -1		10	17	13	14	16	1 3	13	10	10	٠	
	0/ 4 5/ 9		7	19 22	23 11	18 23	16	17	9	7	4 B	1	119		0/ 4 5/ 9		9	1 B 1 6	27	24	13	13	1 O 7	11	3	2	
	10/ 14 15/ 19		2	7	5 1	6	5	2 1	3	2	2	1	35 6		10/ 14		1	B 1	2	2	1	2	1	3	3		
200	TOTAL -25/-21		32	82	87	91	6 <u>1</u>	67	53	36	30	6	545 1	1200	TOTAL -25/-21		38	84	92	8 B 4	70	46	58	50	32	•	
	-20/-16 -15/-11		3	7	3 11	2	7	2 4	8	4	2	1	8 51		-20/-16 -15/-11		6	7	6	11	1 5	10	7	5	5		
	-10/ -6 -5/ -1		9	15 25	14	16	10 16	8 23	7	13	9 11	1	98 131		-10/ -6 -5/ -1		8 12	2 2 1 5	16 34	24 16	17	11	6 B	7	14 7	ı	
	0/ 4 5/ 9		12	25	23 16	25 19	14	7	5	5 9	3	1 2	122 131		5/ 9		B 9	16	27 14	12	1 7 2	15	3	7	11	4	
	10/ 14 15/ 19		2	6	5 1	7	2	1		1	3		27 6		10/ 14 15/ 19		2	5	11	3	4		1		2		
400	TOTAL -20/-16		43	102	92 1	8 B	5 Å	54	28	39	36	5	545 8	1400	TOTAL -25/-21		48	_	112	94	53	60	28	37	44	و	
	-15/-11 -10/ -6		8 17	5 11	1 Î 1 7	5	6	5 9	7	13 7	3 5	2	56 92		-20/-16 -15/-11		9	1 B	2	9	5	8	8	6	2	3	
	-5/ -1 0/ 4		12	25 24	18 30	16 16	19 15	1 B 5	11	7	7 3	4	137		-10/ -6 -5/ -1		19 14	12 16	17 38	18 18	11	11	11	7	11	7	
	5/ 9 10/ 14		11	22	15	14	7	6	4	8	6	3	96 24		0/ 4 5/ 9		13 12	18 18	28 16	15 8	19	10	7 5	10 6	7	1	
	15/ 19 TOTAL		76	98	99	64	57	43	31	40	26	11	54 <b>5</b>		10/ 14 15/ 19		1	9	8	4			1	1			
1 TUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL		TOTAL		71	83	122	76	53	40	42	36	31	,	_
SFC TERS)	INTERVAL (C) INTER (DJF	09 R E	19	29 T 1	39	49	59 H U 1	69	79 1 T	B 9	99 (	* )	OO HR	ABV SFC (MeTers)	AIR TEMP INTERVAL (C) INTER (DJF	00 09 R E	10 19 L A	20 29 T	30 39 V E	40 49 : I	50 59	69 1 1 1	70 79 1	89 T Y	99	*)	0
	FREQUEN	ICY (1)	F WE	ATHE	R (0	aDE:	) FOR	WIN B	TER-	00 F	IR L			/ ,	FREQUE		F WE	ATH	:R (0	ODE	) Far	a wir	NTER				

## TABLE VIII. - Continued

# (b) Spring

ASON: SI TITUDE V SFC ETERS)	PRING (MAM AIR TEMP INTERVAL (C)	R E	L A 10 19	T I 20 29	V E 30 39			I D 60 69	I T	TIME Y 80 89	(GMT): (%) 90 100 99	TOTAL	SEASON: S ALTITUDE ABV SFC (METERS)	PRING (MAM AIR TEMP INTERVAL (C)	R E	L A 10 19	T I 20 29	V E 30 39	40 49	50 59	60 69	70 70 79	ΓY	90 99	T): %)	12 TOT OB
0	-15/-11 -10/ -6					1	,	1 1 1				1 2 3	0	-25/-21 -20/-16 -15/-11							1	1	1 1 2			
	-5/ -1 0/ 4 5/ 9			2	2	1 4 12	1 5 4	7	2	2	1 3	23 39		-10/ -6 -5/ -1					1	1 1 8	9	7 16	7 13	6 15	5	1
	10/ 14 15/ 19 20/ 24		2	3 14 17	14 22 26	16 24 14	6 7 8	7 4 22	10 6	3	1 3	53 86 101		0/ 4 5/ 9 10/ 14				1	2 8	13	16 19	21 24 28	43 26 34	27 25 38	2	1
	25/ 29 30/ 34		5	16 3	18 6	19 10	14	3	1	1		77 23		15/ 19 20/ 24			1		5	9	13 2	35 8	13	30	2 14	1
200	TOTAL -15/-11 -10/ -6		11	55	91	101	49 2 1	53	26	14	8	408 2 2	200	TOTAL -20/-16 -15/-11			1	1	16	46	2	1	169 2		17	
	-5/ -1 0/ 4			1	1 2	9	3	3	2	5	1	10 27		-10/ -6 -5/ -1				1	1	2 7 7	6 9 15	8 19 21	21 23	2 3 6	1	
	5/ 9 10/ 14 15/ 19		1	2 4 10	7 14 23	14 17 20	7 10	10 3 7	4 6 8	5	2 1 1	58 83		5/ 9 10/ 14				1	10 16	22	23 27	27 27	21 24	7 26	•	1
	20/ 24 25/ 29		3	19 9	22 13	20	13 15	16	6	4		103		15/ 19				3	10 43	21 5	21 14	30 17 150	13	13 57	1	1
400	30/ 34 TOTAL -15/-11		11	2 47	8 4	105	59 2	49	28	20	5	5 408 3	400	TOTAL -20/-16 -15/-11				ĺ	1		2	2	1	1	•	•
400	-10/ -6 -5/ -1				1	1	6	1	4			15		-10/ -6 -5/ -1			1	3	5 9	8	3 8 16	19	6 11 12	1 3 4	1	
	0/ 4 5/ 9 10/ 14		2	1	5 12 17	5 14 16	6 7 11	2 10 6	2	6 7 5	2 2 2	31 54 69		0/ 4 5/ 9 10/ 14			1 1 5	13 18	14 27	10 17 18	23 16	16 19 10	21	17	٠	,
	15/ 19 20/ 24		1	18 16	19 21	17 15	15 17	10	10	5	-	91 91		15/ 19 20/ 24			1	13 3	33 10	20 13 1	15 20	23 15	28 10	1		;
600	25/ 29 TOTAL -20/-16		6	47	8 83	17 87	11 75 2	8 46	31	27	6	52 408 2	600	25/ 29 TOTAL -20/-16			9	50	100		103	111	93	43	1	(
600	-15/-11 -10/ -6					1 2	_	1	1			1 4		-15/-11 -10/ -6			,	2	6	6	1 5 13	5 15	1 3 8	1 2 5		
	-5/ -1 0/ 4 5/ 9				3 7 7	3 6 14	4 9 12	5	4 6 3	2 5 5	1 2	20 39 52		-5/ -1 0/ 4 5/ 9			2 3 2	7 16	12 19	14 12	12	13	6	4	1	
	10/ 14 15/ 19		2	10 13	23 18	18	14	7 12	13	7	ĩ	86 92		10/ 14 15/ 19			18 3	19 21	27 27	17 18	20 17	20	15 20	14 7		
	20/ 24 25/ 29		3	11	18 2 78	21 3 83	17 9 81	13 5 56	3 34	3 29	4	89 23 408	800	20/ 24 TOTAL -20/-16			28	69	12 107 1	12 87	13 105	13 100 1	66	38	2	
800	TOTAL -20/-16 -15/-11		,	38	10	1	1	50	54	2,	•	2 1	000	-15/-11 -10/ <b>-</b> 6			1	3	3	1	5	6	4	2		
	-10/ -6 -5/ -1			1	4	1	5	2 5 5	3 5 8	4	1 1	9 29 44		-5/ -1 0/ 4 5/ 9		3 2 1	2 9 6	5 7 16	19 24	13 10 16	16 13 12	6 7 1	10 6	6 5 6	3	
	0/ 4 5/ 9 10/ 14		3	5 8	10 18	13 15 20	10 17	8	3	4	3 2	58 93		10/ 14 15/ 19		1	20 8	20 13	19 25	27 15	15 20	21 31	21 15	13	1	:
	15/ 19 20/ 24		3	12 5	17 7	20 18	14 18	17 15	13	2		97 73	1000	20/ 24 TOTAL		11	1 49	67 1	6 101	10 93	10 92 1	8 82	64	40	4	-
000	25/ 29 TOTAL -20/-16		6	2 33	62	93 1	73 1	60	42	32	7	408 2	1000	-20/-16 -15/-11 -10/ -6		1 2	1	3	2	4	i	1 2	7	2		
000	-15/-11 -10/ -6			1	1	3	3	3	2			1		-5/ -1 0/ 4		3	3 7	13	9 18	14	12	12	3	3 6		
	-5/ -1 0/ 4 5/ 9		3	2	6 9 11	6 9 16	5 9 11	6 8 12	9	5 4 6	1	33 49 71		5/ 9 10/ 14 15/ 19		2 4 4	10 17 7	18 22 9	25 19 23	18 24 19	13 12 24	25 30	10 23 14	10		
	10/ 14 15/ 19		1	8	20	26 18	11	10 18	10	8	3 1	97 93		20/ 24 TOTAL		1 25	1 48		4 104	3 98	2 7 /	2 83	63	30		
	20/ 24 25/ 29		1	1	2	11	15	10	7	21	5 1	49 408	1200	-20/-16 -15/-11 -10/-6		1 2	1 3	1 5	1 1 3	1	6	2	1	2		
200	TOTAL -20/-16 -15/-11		5	28	61 1 1	90	70	67 1	50	31		2		-5/ -1 0/ 4		5	8 12	12 17	11 24	10 8	7 16	4	3 4	3		
	-10/ -6 -5/ -1		1	7	5	9	6	6	1 5 9	5	,	12 44 48		5/ 9 10/ 14 15/ 19		8 2	15 13 10	26 15 8	26 19 16	21 17 23	13 13 19	11 26 21	9 22 12	6 14 2		
	0/ 4 5/ 9 10/ 14		4	4 5 11	9 16 19	8 19 21	17 12	5 14 14	5	5 11	1 1 3	86 100		20/ 24 Tutal		1 30	62	5 90	1 102	1 82	74	73	57	33		,
	15/ 19 20/ 24		2	8 1	11	11	16 6	24 6	17	7		96 19	1400	-20/-16 -15/-11 -10/ -6		1	1 2 5	3	2	1 5	1	6	1 2 5	3 2		
400	TOTAL -20/-16 -15/-11		7	36 1	1	72 1	69	71	48	34	5	408 1 3		-5/ -1 0/ 4		8 13	14 15	12 15	21	10 17	13	1 5	8	2		
	-10/ -6 -5/ -1		2	1 2	1 8	2 B	6	8	5	3 7		15 49		5/ 9 10/ 14		10	12 21 5	27 15 11	19 15 7	20 22	14	10 26	9 30 4	13	1	:
	0/ 4 5/ 9 10/ 14		5 7 6	4	10 18 14	12 18 22	11 15 13	10 20	6 9 14	3 7 12	1 1 3	56 89 114		15/ 19 20/ 24 Total		1 53	2 77	2 86	70	16 91	70	64	62	29	1	
	15/ 19 20/ 24		2	4	10	9	11	18	22	4	=	80 1	ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TO T
	TOTAL AIR TEMP	00	10	27	30	72 40	5 B	62 60	70	36 80	90 100	408 TOTAL	(METERS)	INTERVAL (C) PRING (MAM)	RE	ĹΔ	7 I	V E	• 7	UM	I D	. I T	TIME	()	();	
SFC :	INTERVAL (C)	09 R E	19 L A	29 T I	39 V E	49 H	59 U M	69 1 D	79 I T	89 Y	99	OBS	J= <b>J=</b> J			u-	A TUE		000	E	- u -		-			
SONES	PRING (MAM	)								TIME	(GMT):	OD HR		FREQUENC	, Y DF 2	WE/	ATHE		nnF 1	FOR 9	SPR		TOTA			

#### TABLE VIII. - Continued

### (c) Summer

PERIOD: JAN 1959-DEC 1968			ELV: 138 M 38 58Na 92 22 W
SEASON: SUMMER (JJA)  ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y  ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 (HETERS) (C) 09 19 29 39 49 59 69 79 89		INTERVAL 00 10 20 30	TIME (GMT)1 12 HR H U M I D I T Y (%) TOTAL 40 50 60 70 80 90 100 DB5 49 59 69 79 89 99
0 15/19 1 3 1 20/24 2 5 28 9 8 12 14 25/29 7 51 78 82 52 38 6 30/34 2 14 40 121 87 13 1 35/39 7 8 9 1	2 7 0 6 84 1 315 278 25	5/ 9 10/14 15/19 1 20/24 25/29	1 1 3 5 1 2 6 33 45 1 88 3 12 48 101 140 12 317 4 14 51 155 156 5 385 2 7 7 12 2 30
TOTAL 2 30 104 236 179 74 54 21 200 10/ 14 15/ 19 3 3 3 2 5 20/ 24 4 11 47 28 18 21 10 25/ 29 9 51 104 111 72 29 4 30/ 34 8 17 73 58 4 1	9 709 1 1 200 1 17 5 144 380 161	TOTAL 1 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	10 35 113 302 346 18 825 1 3 8 20 18 5 54 2 11 49 87 79 40 268 1 13 45 139 194 58 450 1 10 9 23 9 52
35, 39 3 3 107aL 24 82 227 200 97 53 19 400 10, 14 1 1 1 15, 19 4 7 5 5 4 6 20, 24 5 23 73 58 47 34 14 25, 29 8 40 89 136 61 22 1	7 709 400 1 3 34 2 256 357	TOTAL 5/ 9 10/ 14 15/ 19 2 20/ 24 2 25/ 29 1 2	4 37 111 269 301 103 825 1 1 2 4 3 8 11 4 4 34 14 45 53 37 31 34 216 15 61 87 147 97 27 2 438 13 16 46 45 9 132
30/ 34 5 7 29 13 4 35/ 39 1 TOTAL 19 74 199 212 117 61 21 600 10/ 14 1 1 1 15/ 19 2 3 20 34 12 7 9 20/ 24 6 24 76 87 76 49 13	58 1 6 709 600 3 4 91 331	30/34 TUTAL 1 6 5/9 10/14 2 15/19 1 4 20/24 1 2	1 2 47 127 194 241 141 66 2 825 2 2 8 16 7 5 5 45 31 51 60 38 41 31 257 34 63 112 150 66 10 1 439
25/ 29	270 14 4 709 800 2 16 3 158 378	25/29 1 1 6 TUTAL 1 3 14 5/9 10/14 2 15/19 2 6 20/24 1 4 9	10 18 28 10 2 82 83 140 210 207 114 46 1 825 1 4 6 19 25 9 5 9 75 30 56 75 60 40 27 2 298 37 66 106 132 46 7 1 409
25/ 29	154 3 5 709 1000 1 1 3 38	25/ 29 1 5 TOTAL 1 7 22 5/ 9 10/ 14 1 4 15/ 19 4 7	12 9 9 2 38 85 151 219 203 91 43 5 825 3 3 1 1 8 16 28 37 16 8 9 119 31 63 96 74 48 21 1 345
15/ 19 1 11 51 70 59 37 15 20/ 24 2 15 49 107 123 62 12 25/ 29 2 8 9 23 12 30/ 34 1 1 1074 5 37 112 207 209 104 30 1200 5/ 9	1 245 370 54 1 1200 5 709 1 2	20/24 1 4 19 25/29 2 7 TOTAL 1 11 37 5/9 2 10/14 2 18 15/19 1 8 15	5 4 3 21 86 153 243 167 90 36 1 825 2 5 6 3 1 19 14 32 41 19 16 11 153 51 66 103 101 63 24 1 433
10/ 14 6 6 26 26 10 5 15/ 19 3 24 46 76 82 58 26 20/ 24 1 2 15 41 90 95 43 8 25/ 29 3 5 3 2 TOTAL 1 5 48 98 195 206 111 39 1400 5/ 9 2 1 4 2 2	1 80 4 319 295 13 1400 6 709 1 12	20/ 24 1 9 12 25/ 29 3 2 7074L 2 22 49 5/ 9 1 3 10/ 14 8 9 11 15/ 19 12 15 17	26 51 55 46 11 1 212 3 96 154 205 169 91 36 1 825 3 5 14 7 1 1 35 24 35 42 41 20 17 207 41 79 84 111 73 27 459
1400 5/ 9 2 1 4 2 2 10/ 14 2 5 5 14 28 40 24 15 15/ 19 5 10 17 46 78 114 82 32 20/ 24 2 8 16 35 35 46 25 3 25/ 29 1 1 TOTAL 9 23 39 98 142 204 133 52	3 136 3 1 388 1 171 2 ALTITUDE 7 2 709 ABV SFC	20/ 24 6 9 15 TOTAL 27 36 43 AIR TEMP 00 10 20 30 INTERVAL 09 19 29 39	15 35 26 17 1 124 B3 154 166 176 95 45 B25 40 50 60 70 80 90 100 TOTAL 49 59 69 79 89 99 UBS
ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 (HETERS) (C) R E L A T I V E H U H I D I T Y SEASONI SUMMER (JJA)	(METERS) 90 100 TOTAL SEASONI! 99 D85 (%) (GMT): 00 HR	(C) RELATIVE SUMMER (JJA)  FREQUENCY OF WEATHER (C)	TIME (GMT): 12 HR
FREQUENCY OF WEATHER (CODE) FOR SUMMER-OO F	IR	44 42 8 743	1 82 920
23 182 4 100 2 609 92			

35

#### TABLE VIII. - Concluded

#### (d) Fall

													(4)	ı aıı													
PERIODI	JAN 1959-DE	C 196	68																		ELV	1 13	8 M	38 5	58N.	92	22 W
SEASON: ALTITUDE	E AIR TEMP	RE	LA	т	ΙV	ε	нυ	мі	1	TΥ		% )	OO HR Total	SEASON:	E AIR TEMP	RE	. L	ΔТ	ιv	E	нυ	мі	D I	TΥ	t	<b>%</b> )	AH SI
ABV SFC (METERS)	INTERVAL	00	10	20 29	30	40		60	70 79			100	085	ABV SFC (METERS	INTERVAL	00	10	20	30	40	50	60	70	80	90 99	100	OBS
0	-10/ -6				1		1						2	0	-15/-11						1	. 1		1			3
	-5/ -1 0/ 4				1	5	3		7	2	1		5 33		-10/ -6 -5/ -1						14		4 15	2 15	3 12	1	11 51
	5/ 9 10/ 14			1	8 24	20 29	20		3 10	5 2	3		60 106		0/ 4 5/ 9					3	10		24 29	36 41	29 42	2	110 148
	15/ 19 20/ 24		1	14	36 24	21 32	27	10	12	12	7 5	1	141 137		10/ 14 15/ 19				1	6	7	24	24	51 36	55 62	7	175 146
	25/ 29 30/ 34		1	18	37	28 7	21	18	4	2			129 39		20/ 24 TOTAL			1	1			2	10	27	26	1 15	67 711
	35/ 39 Total		4	6	145	142			48	33	23	1	663	200	-20/-16 -15/-11			-	•		1	1	•••	•••		•=	1
200	-10/ -6 -5/ -1		•	0,5	1	1	1 4		1 2	1		_	3		-10/ -6 -5/ -1					1		3	4 15	2 14	1		11 39
	0/ 4			1	6	8 17	9	11 12	7 2	3	1 3		45 55		0/ 4 5/ 9				5	6	15	22	24 30	17	5 13		91 130
	10/ 14 15/ 19		1	3 14	33 33	30 26	22 27	11	6	7	7		119 144		10/ 14 15/ 19				5	8	26	29	52 37	31 49	29		180 172
	20/ 24 25/ 29		i	15	27 30	35	29	18	20	6	4		155		20/ 24				į	2		7	21	40	10		84
	30/ 34 35/ 39		i	1 2	13	7	2		,				24	400	TOTAL				11	33	86 1	129	183	179	90		711
400	TOTAL		4			144	125	87	53	28	21		663	400	-20/-16 -15/-11 -10/ -6					,		1 2					1
400	-10/ -6 -5/ -1 0/ 4				1 5	4 8	2	1 9	5	1			13		-5/ -1				1	1	5	6	14	1 4 9	2		10 33
	5/ 9			3	16	19	14	8	1	2	7		70		5/ 9			2	9	15 27	32		14	14	7	1	129
	10/ 14 15/ 19		1	9	33	35 31	19	16	10	8	5 7		133		10/ 14 15/ 19			6	15	22 24	31	30	36	19 25	24	1	164
	20/ 24 25/ 29		1	12 8	34 16	36 20	21 16	27 16	18	7	1		157 81		20/ 24 25/ 29			2	8	10	7	5	29	34	3		115 14
	30/ 34 Total		4	41	9 146	5 158	114	95	56	28	21		15 663	600	TOTAL -20/-16			13	50	101	126	116	136	106	60	3	711 2
600	-15/-11 -10/ -6				1		2	1	1				5		-15/-11 -10/ -6			1	2	1	3	3	1	2			13
	-5/ -1 0/ 4			2	10	12	6	6 5	7	4	2		20 48		-5/ -1 0/ 4			4	9	10	14	10	8 14	7	4	1	30 72
	5/ 9 10/ 14			11	21 29	23 37	17 23	10 19	3 10	9	7		88 145		5/ 9 10/ 14		1	10	24 20	31	21 30	21 29	16	5 17	6 20	2	117 176
	15/ 19 20/ 24		1	10	30 24	31 37	25 24	28 26	11 20	12	5		152 148		15/ 19 20/ 24		1	3	21 7	25 6	34 15	27 24	36 32	23 15	16 2		186 104
	25/ 29 30/ 34		1	5	5	11	15	9	2				47 9		25/ 29 Total		3	3 30	84	100	6 127	2 127	116	71	48	,	711
800	TOTAL -15/-11		2	42	126	159	115	104	58	37	20		663 1	800	-20/-16 -15/-11				1		1						1
	-10/ -6 -5/ -1			1	7	2	1 5	3	1	1	3		7 33		-10/ -6 -5/ -1			1 2	2	3	2 8	3 6	1 8	1	1	1	14 37
	0/ 4 5/ 9		3	6	10 18	9 26	11	5 16	3	1	2		48 104		0/ 4 5/ 9		1 2	8 12	8 25	15 21	17 15	12 15	8	5	3	2	79 110
	10/ 14 15/ 19			13	26 27	36 28	31 28	17	16 22	11 11	7 5		157		10/ 14 15/ 19		3	12 17 9	22	28 29	40	24 27	18 33	25 27	15 15	2	194 185
	20/ 24 25/ 29		1	10	12	23	25	32	19	5	•		126		20/ 24 25/ 29		-	9	3	6	16	18	23	10			85 5
	30/ 34 TOTAL		5		1	133		-	73	39	25		663	1000	TOTAL -20/-16		8	58	86	106	124	106	97	76	43	7	711
1000	-15/-11 -10/ -6		-	1		1	1	1 1	1	1 2	1		4 8	1000	-15/-11 -10/ -6			1	2	,	ì	3	2	1	1		2 16
	-5/ -1 0/ 4		ļ	1 8	7 7	4	3	5 13	3	4	2	2	30 58		-5/ -1 0/ 4		4	9	11	9	4	3 14	7	2	1	1	37
	5/ 9		3	18	20	12 36	20	13	9	9	8	2	138		5/ 9 10/ 14		4	24 15	25	17	17 16	20	10	8	8	3	86 134
	10/ 14 15/ 19		1	8	20	30	25 25	26 30	17 23	15	4		156		15/ 19		2	12	28 15	37 29	28 15	18 37	22 30	26 31	14 10	2	195
	20/ 24 25/ 29			10	7	12	23	23 i	17	3	••		97 13	1240	20/ 24 TOTAL		19	6 68	92		10 96	15 110	16 92	75	37	5	711
1200	TOTAL -15/-11		11	60	85 1	136 1	110	1	72	52 1	50	4	663	1200	-20/-16 -15/-11			1		1	2				1		4
	-10/ -6 -5/ -1		2	5	7	4	3	3	3	4	1	1	30		-10/ -6 -5/ -1		2	6	14	4	5	7	1	2	2	1	14 44
	0/ 4 5/ 9		5	14 21	8 34	13 19	11 20	7 15	13	2 12	8	2	71 149		0/ 4 5/ 9		8	30	13 27	15 24	11 18	10 14	3 16	2 16	8	ž	79 163
	10/ 14 15/ 19		3	23 10	24 16	29 22	22 30	26 34	27 32	18 13	6 3		178 160		10/ 14 15/ 19		5 1	24 14	42 18	24 18	26 13	14 30	35 39	24 26	17 7		211 166
	20/ 24 25/ 29		2	7	3	7	10	19	6	1			55 5		20/ 24 TOTAL		21	98	1 116	89	7 86	8 85	5 100	72	37	7	29 711
1400	TOTAL -15/-11	1	18	B 1	95	97	99	106 1	8 B 1	53 2	51	5	663 4	1400	-20/-16 -15/-11		1		1	2	1	1			1		1
	-10/ -6 -5/ -1		2 7	6	2	3	6	3	4	3	2	1	14 34		-10/ -6 -5/ -1		7	3 10	7	3 5	1	9	2	4	1	1	15 46
	0/ 4 5/ 9	2	20	13 23	27	10 26	14 16	5 17	8 16	2 19	7	2	73 173		0/ 4 5/ 9		14 21	16	19 23	15 20	9 17	6 26	4 12	6 24	4	á	97 176
	10/ 14 15/ 19		4	19 14	9	26 10	21	34	24 32	19 15	10		194 142		10/ 14 15/ 19		18 9	29 7	29		20 15,			35 22	17		218 137
	20/ 24 Total		1	4 80	3	4	8	9 101			25	4	29 663		20/ 24 TOTAL		2 73	95	89	84	72	4		91	32	ĕ	15 711
ALTITUDE	AIR TEMP	00 1	10	20	30	40	50	60	70	80	90 ì	00	TOTAL	ALT1TUDE	AIR TEMP	00	10	50	30	40	50	60	70	80	90 10	יד סכ	
ABV SFC (METERS)	AIR TEMP INTERVAL (C)	09 1 R E L	19 L A	29 T I	39 V E	49 H	59 U M	69 I D	79 1 T	89 Y	99 (%	)	OBS	ABV SFC (METERS)	AIR TEMP Interval (C)	09 R E	19 L A	₹9 T I	39 V E	49 H	59 U M	69 I D	79 I T	89 Y	99 (%)	, (	OBS
SEASON: F	ALL (SON)								١	IME	(GMT	11	00 HR	SEASON: F	ALL (SON)	)							1	IME	(GMT)	1 12	2 HR
	FREQUENC	YOF	WFA	THER	. (0	DE)	FOR	FALL	-9	O H	₹				FREQUENC	YOF	WEA	THE	3 (00	DE)	FOR		. ~1	2 HR			
	1								1	OTAI					1	2	3	•	•		9	6	Т	DTAL			
	33 1	45	27	284			2	379		910	,				45 1	29	24	650	,		1	61		910			

# TABLE IX.- FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR SAN ANTONIO, TEXAS

PERIOD: JAN 1956-DE	EC 1965																ELV:	243	M 29	32N, 9	8 28 W
SEASON: WINTER (DJ) ALTITUDE AIR TEMP ABV SFC INTERVAL (METERS) (C)	RFL	50	30	40 49	U M 50 59	60 69	I † 70 79	T I ME Y 80 89	(GMT): (%) 90 100 99	TOTAL	SEASONI W ALTITUDE ABV SFC (METERS)	INTER (DJF AIR TEMP INTERVAL (C)	00 1	0 7	[ I V 20 3	0 40	4 U M 50 59	I D 60 69	71 M 70 BC 79 89	90 10	1 12 HR TOTAL 10 OBS
0 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34	1 1 3 2 2	16 29 13	2 11 41 48 17 6	1 18 35 23 19	3 5 30 18 23 4	1 8 15 32 20 1	1 3 5 18 25 15	5 4 18 19 12	6 11 12 2	1 18 66 185 209 123 20	0	-15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24			1	1 1 4 1 4 3 12 2 3	4 15 26 10	33	1 20 20 50 35 27 45 9 29 2 20	30 35 48 1	1 56 169 0 195 4 123 7 77
TOTAL 200 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	100 22 1 1 3 5 4	14 22 27 37	125 1 16 40 32 14	97 3 21 37 22 12	83 4 11 19 27 8	77 1 11 20 21 19	67 1 3 4 29 34 12	58 6 17 21 18 4	1 11 10	623 5 21 96 202 206 81 12	200	TOTAL -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19			1	2 28	55 1 7 31 42 14	1 4 26 32	09 157 11 1 15 20 29 39 15 54	163 2 1 1 1 18 1 18	17 638 1 4 33 112 198 1 195
TOTAL 400 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	18 2 3 7 9	10 30 36	106 1 27 33 28 11	96 9 22 30 15	70 1 5 10 18 19	73 2 4 17 21 32 11	83 10 28 29 8	66 3 5 20 26 24 2	1 10 7	623 10 35 117 203 199 53	400	20/ 24 TOTAL -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9	1	<u>د</u> 0	1 9 3 1 1 3	1 2 6 9 17 2 27	97 1 4 13 18	83 3 13 14	73 138 4 5 14 6 15 35 23 67	121	1 638 1 6 28 78 166 1 234
TOTAL 107 -6 -107 -6 -57 -1 07 4 57 9 107 14 157 19 207 24	25 1 3 1 2 10 8 3	93 2 4 15 40 22	102 1 5 29 35 25	83 14 26 29 15	56 5 16 12 15	1 2 19 20 30 5	78 1 5 13 31 26	80 2 6 22 26 28	18 1 4 15 4	623 2 12 43 146 218 173 27	600	15/ 19 20/ 24 TOTAL -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9	ì	2 3 8	16 1 54 8	2 2 1 69 1 7 5 6	5	4 58 1 5	9 31 65 144 1 4 9 18 32	. 40 78 2	119 6 1 638 2 3 30 67 184
25/ 29 TUTAL 800 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19	28 2 1 7 13	2 89 2 4 7 16	_	88 1 1 16 24 14	54 2 10 19 25	77 1 4 10 22 17	78 1 3 2 17 30 26	85 2 6 25 43 16	2 15 15	2 623 4 15 56 174 231 126	ВОО	10/ 14 15/ 19 20/ 24 TUTAL -15/-11 -10/ -6 -5/ -1 0/ 4		2 2	28 2 15 1 3 98 8	8 18 0 4 1 1 9 61 1	20 7 1 64	23 7	26 50 5 16 55 111 1 1 5	28 . 76	1 246 96 10 1 638 1 5 30 72
13/ 17 20/ 24 TOTAL 1000 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9	2 33 2 2 2	87 1 3	3 102 2 12 42	74 1 4 16 27	3 9 26	1 55 1 4 12	79 1 4 19	92 1 5 22	35 1 3 17	17 623 1 1 18 67 190	1000	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL -15/-11 -10/ -6	1	1 5 2 1	33 3 38 2 14 3 57 9	6 14 3 18 8 4 2 2 47	16 18 9 56	12 12 4	22 28 19 48 13 49 102	14 52 16 16	186 255 79 10 638 1 2
10/ 14 15/ 19 20/ 24 TOTAL 1200 -15/-11 -10/ -6 -5/ -1 0/ 4	18 8 2 41 1	15 5 87	37 14 3 110	26 17 3 94 6	15 14 1 68 1	22 11 50	28 18 70	33 8 69	13 34	227 105 14 623 1 2 17	1200	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL -10/ -6	1	9	17 1 40 3 39 2 12	0 25 5 19 6 8	5 6 17 19 5	19 17 5	10 5 14 37 28 28 3 6	2 7 19 3 32 3 4	26 82 220 237 63 7 638
5/ 9 5/ 9 10/ 14 15/ 19 20/ 24 TUTAL 1400 -15/-11 -10/ -6	17 30 13 3	31 32 18 6	41 33 13	20 21 6 1 67	22 19 10 68	12 12 5 35	20 22 7 57	31 34 3 74	23 8 38	217 211 75 11 623 1		-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TUTAL	2 2	3	22 1 50 3 42 2 15 4 7	4 24 0 15 6 7 7 61	3 6 15 16 4	18	1 5 9 19 36 15 25 2 42 76	3 19 7 27 2 1	24 93 241 216 53 7 638
-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TDTAL	1 6 30 41 16 2 97	14 38 33 14	24 6 1	5 20 19 24 6	16 23 8	3 7 20 15 1	1 5 22 20 2	11 27 25	8 13 1 5	18 105 229 210 53 4 623	1400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	1	• 7 • 5	9 28 1 46 3 33 1 15	7 24 4 21 5 4	16 5	2	8 10 18 31 25 1 1	1 17	3 26 101 260 196 50 2 638
ALTITUDE AIR TEMP ABV SFC INTERVAL (METERS) (C) SEASON: WINTER (DJ	00 10 09 19 R E L F)	29	30 39 I V E	40 49 : H	50 59 U M	69 I 0	70 79 1 T		90 100 99 (%) (GMT):	OBS	ALTITUDE ABV SFC (METERS) SEASON1 V	AIR TEMP INTERVAL (C) VINTER (DJF	00 1 09 1 R E I	10	20 3 29 3	0 40 9 49	50 59	60	70 80 79 89 I T Y	90 10	DBS TOTAL
FREQUEI	NCY OF W	FATH	ER {0	DDE)	FOR	WIN	ITER-	00 H	IR L			FREQUEN	ICY DF	WEA	THER	( C O D E	) FOR	LMINI	ER-12	HR	
54		-	09		2	214		90				1	2 2	3 40	-4 590		9 5	8 48	7 01	7AL 903	

#### TABLE IX. - Continued

### (b) Spring

PERIOD: JAN 1956-DEC 1965	ELV: 243 M 29 32Ns 98 28 W
SEASON: SPRING (MAM)  ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 GBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASONI SPRING (MAM) ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99
0 5/9 1 2 1 1 2 7 10/14 6 2 3 1 4 1 2 19 15/19 3 9 18 8 10 5 7 9 8 77 20/24 4 23 15 15 16 14 25 18 4 134 25/29 8 22 17 23 39 34 15 1 1 160 30/34 3 8 26 29 6 2 74 35/39 3 1 4 7D7AL 18 63 87 79 74 56 52 29 17 475	0 -5/ -1 2 1 1 4 0/ 4 1 1 4 8 10 6 2 1 33 5/ 9 2 5 6 10 24 26 6 1 80 10/ 14 3 7 12 17 21 21 39 5 125 15/ 19 1 1 1 2 14 12 51 101 1 184 20/ 24 1 1 3 6 10 85 123 2 23 25/ 29 3 2 1 70TAL 2 8 17 26 59 78 191 272 10 663
200 0/4 1 1 2 8 1 1 2 8 1 1 2 8 1 1 2 1 1 2 8 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2	200 -5/-1 1 2 2 5 0/ 4 1 3 4 4 1 2 15 5/ 9 10 8 6 16 17 6 1 65 10/ 14 1 7 17 18 13 16 39 18 129 15/ 19 4 7 13 14 11 17 109 95 270 20/ 24 2 2 1 1 1 7 22 76 66 78 25/ 29 10 TOTAL 2 7 25 41 45 51 78 231 182 1 663
TOTAL 18 64 78 75 79 57 63 28 13 475  400 0/4 1 1 1 1 3  5/9 1 3 4 5 1 2 11  10/14 3 7 8 9 5 6 7 5 2 32  15/19 3 25 13 12 13 8 17 11 6 108  20/24 13 18 18 19 35 40 39 13 4 199  25/29 3 4 15 31 33 6 3 1 1 97  30/34 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	400 -107 -6
TOTAL 23 57 60 76 86 60 66 32 15 475 60 76 86 60 66 32 15 475 60 76 86 60 66 32 15 475 60 76 86 60 66 32 15 475 60 76 86 76 875 76 76 76 76 76 76 76 76 76 76 76 76 76	TOTAL 14 34 38 29 43 54 102 217 131 1 663 1-10/-6 1 1 1 1 1 5 0 1 1 1 1 5 0 1 1 1 1 1 5 0 1 1 1 1
TOTAL 16 48 59 72 85 73 66 41 15 475 800 0/4 1 3 2 1 1 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	### 1074L
1000 -5/-1 2 2 2 2 2 3 3 1 9 7 10/14 1 7 27 9 16 12 13 13 10 108 15/19 10 23 16 21 25 41 47 25 7 215 20/24 5 4 9 8 26 31 10 5 1 99 25/29 25/29 2 2 1 10 10 5 1 9 10 10 10 10 10 10 10 10 10 10 10 10 10	15/19 18 23 12 10 15 27 53 109 55 322 20/24 8 5 5 8 13 10 6 6 2 63 25/29 2 1 1
TÖTAL 17 44 67 49 72 91 72 43 20 475  1200 -5/-1 2 2 2 4  5/ 9 2 13 15 8 5 5 3 1 4 56  10/ 14 2 16 14 18 16 10 21 24 9 130  15/ 19 17 12 20 21 29 35 64 25 6 299  20/ 24 4 6 4 4 9 12 3 2 1 45  25/ 29 1 1 1 1 3	157 19 15 24 15 16 42 45 46 63 31 297 207 24 9 4 4 12 13 7 2 1 52 257 29 2 1 2 1074 47 71 59 61 88 76 77 116 68 663 1200 -107 -6 1 1 1 200 -57 -1 1 2 1 4 07 4 3 3 5 5 7 1 1 1 1
TOTAL 26 48 54 55 63 66 91 52 20 475  1400 -5/-1 1 1 1 3  0/ 4 5 2 2 4 1 44  5/ 9 6 9 14 14 10 3 6 2 4 68  10/ 14 8 19 22 22 12 22 25 24 8 162  15/ 19 19 11 17 16 39 43 40 14 5 204  20/ 24 5 3 4 3 5 4  TUTAL 38 42 63 58 69 76 72 40 17 475	5/ 9 12 15 12 8 11 6 8 12 7 91 10/14 23 27 27 15 11 18 28 47 38 234 15/ 19 17 39 29 22 28 26 39 39 18 257 20/ 24 10 10 14 9 7 2 52 26/ 29 1 1 1 25/ 29 1 1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABY SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 UBS (METERS) (C) R E L A T I V E H U M I O I T Y (%) SEASON! SPRING (MAM)	5/ 9 16 19 8 12 8 9 8 12 9 101 10/ 14 33 34 22 18 15 34 31 46 21 254 15/ 19 37 31 26 24 18 28 41 20 4 229 20/ 24 12 11 9 7 2 25/ 29 1 1074L 105 100 75 68 46 71 81 81 36 663
FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR 1 2 3 4 9 B TOTAL 15 416 11 159 3 316 920	ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 0BS (METERS) [C] RELATIVE HUMIDITY (3) SEASONI SPRING (MAM)
	FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR 1 2 3 4 9 B TOTAL
	62 176 13 554 6 109 920

#### TABLE IX. - Continued

PERIOD	JAN 1956-DE	C 196	5																ELV	: 24	3 M	29 3	2N. 98	28 W
	SUMMER (JJA AIR TEMP INTERVAL (C)	RE	L A 10 19	T 1 20 29	7 E 30 39	40 49	1 U M 50 59	I D 60 69			(GMT); (%) 90 100 99	TOTAL	SEASON: S ALTITUDE ABV SFC (METERS)	UMMER (JJA AJR TEMP Interval (C)	R E	10	T 1 20 29	V E 30 39	H U 40 50 49 59	60		ΓŸ	(GMT)1 (%) 90 100 99	TOTAL
0	15/ 19 20/ 24 25/ 29 30/ 34 35/ 39		2	3 10 88	2 80 135	6 100 19	8 40	15 9	1 3 21	19	5 1	1 10 65 239 244	0	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 TUTAL					4 10	9 37 46	31	2 248 143	45 1	3 20 538 270 1 832
200	40/ 44 TOTAL 20/ 24 25/ 29 30/ 34 35/ 39			3	217 1 9 180 20	1 21	48 34 37	25 5 28 6	25 7 19	10 7 1	6	1 560 22 115 382 41	200	10/ 14 15/ 19 20/ 24 25/ 29 TOTAL					4 11 2 9 4 11 6 20	3 22 25	1 86 20	4 434 15 453	3 188 4	1 11 741 79 832
400	TDTAL 20/ 24 25/ 29 30/ 34		2	60 4 30	210 2 29 129	143 78 88	71 4 86 17	39 9 36	26 19 13	8 6	1	560 45 246 266	400	10/ 14 15/ 19 20/ 24 25/ 29 TOTAL			1	3 1 4	10 7 7 6 17 15	52 12	162	16 435 451		1 25 775 31 832
600	35/ 39 TOTAL 15/ 19 20/ 24 25/ 29		2	8	3 77		20 106	45 25 38	32 3 25 5	6 1 8	1	560 4 88 376	600	10/ 14 15/ 19 20/ 24 25/ 29			•	2 1 3	1 3 17 49 9 8	1 5 125 3	9 200 1	60	16 51	1 94 715 22 832
800	30/ 34 TOTAL 15/ 19 20/ 24 25/ 29		2	6 14 5	10	40 188 3 21 159	132 1 47 98	63 3 65 28	33 2 35 3	9 4 8		92 560 13 186 351	800	TOTAL 10/ 14 15/ 19 20/ 24 25/ 29		1	10	21	3 4 40 90	15 124	54 138	134 119	34 1 22	1 245 565 21
1000	30/ 34 TOTAL 15/ 19 20/ 24 25/ 29			7	6 74 9 27	185 2 58 99	146 7 95 62	96 5 116	40 6 48	12 6 7		10 560 26 333 201	1000	TOTAL 10/ 14 15/ 19 20/ 24 25/ 29			11	25 1 21 1	53 100 3 32 52 114 2 3	79 112	141	2 129 28	56 I 22 3	832 4 407 415 6
1200	TOTAL 10/ 14 15/ 19 20/ 24 25/ 29			1	36 2 12 7	1	164 13 150 13	130 17 133	54 37 43	13 15 2		560 2 88 430 40	1200	TOTAL 5/ 9 10/ 14 15/ 19 20/ 24		2	12	23 5 32	57 151 30 85 63 69	137	1 148	6 107	25 1 20	832 1 11 533 285
1400	25/ 29 TDTAL 10/ 14 15/ 19 20/ 24 25/ 29 TDTAL			2	21 4 8 1 13	112	177 2 33 134		80 1 71 35	17 22 1		560 4 208 345 3	1400	25/ 29 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24		5 1 12	20	1 38 28 20	1 94 15 69 13 34 36	203	179 12	115 6 72	21 1 14	2 832 1 27 648 156
ALTITUDE ABV SFC (METERS) SEASON!	AIR TEMP		10 19 L 1	20 29 T	30 39 I V	40	50	60	70 79	80 89 7 Y	90 100 99 (%) (GMT):	TOTAL	ALTITUDE ABV SFC (METERS) SEASON:	TOTAL  AIR TEMP INTERVAL  (C) SUMMER (JJ4		13 10 19	31 20 29		103 17: 40 50 49 5	200	70	80 89 T Y	90 100 99 (%) (GMT):	832 TOTAL OBS
	FREQUE	2	F WE		ER (	CODE	) FOF	SUN B	MER-	-00 F	IR L			FREQUEN	NC Y 0	F WE		R (C	ODE) F		MMER B	-12 H		
	9	339		1	25		4	535	i	92	0			11	66	5	52	9		30	3	92	10	

#### TABLE IX. - Concluded

#### (d) Fall

PERIOD: JAN 1956-DEC 1965	ELV: 243 M 29 32N, 98 28 W
SEASON: FALL (SON) ALTITUDE AIR TEMP R E L A T I V E H U H I D I T Y (%) TOTAL ABU SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 OBS (HETERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASON: FALL (\$ON)  AUTITUDE AIR TEMP R E L A T I V E H U H I D I T Y (\$) TOTAL  ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 UBS  (METERS) (C) 09 19 29 39 49 59 69 79 89 99
0 0/4 1 1 3 2 1 4 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1	0 -5/ -1 3 3 6 0 0/ 4 1 3 2 12 12 2 1 33 6 5 7 7 9 1 1 5 3 7 19 29 18 82 10/ 14 3 6 6 6 24 46 35 77 9 19 19 19 19 19 19 19 19 19 19 19 19 1
200 -5/-1 1 1 1 0/ 4 5 1 1 1 4 10/ 14 4 13 7 6 2 2 4 2 40 15/ 19 6 24 24 9 13 17 12 3 108 20/ 24 13 27 40 30 46 40 27 3 226 25/ 29 2 21 39 53 36 39 12 4 206 30/ 34 10 35 41 6 92	0/4 8 5 5 1 1 20 5/9 1 9 12 6 9 4 2 43 10/14 2 6 11 18 28 19 35 11 130 15/19 1 5 8 16 24 44 78 54 230 20/24 1 1 7 13 12 34 150 98 316 25/29 1 1 5 4 3 3 1 18 707AL 5 14 44 69 79 111 271 166 759 400 -5/-1 1 1 2 1
400 -5/-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5/9 1 3 9 4 5 6 2 4 2 36 10/14 2 9 21 14 15 11 16 25 8 121 15/19 2 9 8 24 17 21 47 94 37 20/24 20/24 1 3 7 16 13 21 57 142 58 1 319 25/29 2 1 5 2 10 10714 7 24 50 64 56 61 125 266 105 1 759 600 -5/-1 1 1 0/4 1 3 2 2 2 2 12
TOTAL 7 63 104 147 116 102 94 51 6 690 600 -5/-1 1 1 1 5/ 9 1 6 8 6 3 1 2 2 29 10/ 14 1 10 10 20 7 7 12 10 2 79 15/ 19 2 13 25 35 27 4 29 48 19 3 198 20/ 24 13 25 27 50 47 43 24 1 230 25/ 29 6 22 45 52 11 6 144 30/ 34 2 1 4 7	5/9 3 11 4 4 5 3 2 4 2 38 10/14 3 13 20 20 17 19 14 27 10 143 15/19 2 7 14 18 27 35 65 95 44 307 20/24 3 8 13 26 32 60 78 35 1 256 25/29 1 1 27 1741 9 37 458 75 90 143 206 91 1 759 800 75/-1 1 0/4 2 2 3 1 1 2 2 11 5/9 9 7 4 5 5 4 3 2 6 3 43
TUTAL 4 52 92 137 136 95 113 55 6 690 800 -5/-1 1 1 1 1 3 5 6 690 90 90 90 90 90 90 90 90 90 90 90 90 9	10/14 9 17 13 24 28 17 18 30 11 167 15/19 5 10 17 25 26 39 70 105 61 1 359 20/24 10 10 15 24 25 41 41 10 176 25/29 1 1 2 1074L 25 46 48 71 83 84 132 184 85 1 759 1000 -5/-1 1 1 2 0/4 3 2 2 1 1 9 5/9 11 8 3 10 1 2 5 7 4 51
TÔTAL 10 43 76 122 129 115 121 63 11 690 1000 0/4 2 3 1 1 2 1 10 10 5/9 3 11 9 6 5 2 1 1 2 40 10/14 6 10 18 20 24 16 15 22 2 133 15/19 2 16 26 29 36 53 58 51 3 274 20/24 1 8 18 34 50 63 29 7 1 211 25/29 1 2 13 13 124 135 105 82 8 690	15/19 3 19 26 31 31 58 84 106 38 1 397 20/24 4 9 13 24 24 19 6 3 102 TOTAL 29 50 63 77 81 112 133 153 60 1 759 1200 -5/-1 1 1 2 4 0/ 4 5 2 1 1 1 10 5/ 9 11 8 10 4 6 1 5 9 4 58 10/ 14 13 24 23 15 25 39 37 40 24 240
1200 -5/-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15/ 19 11 32 30 32 39 54 79 90 21 1 389 20/24 2 7 9 8 14 12 4 1 1 58 TUTAL 43 74 73 59 84 100 125 143 51 1 759 1400 -5/ -1 1 1 1 3 5/ 9 13 11 7 1 2 13 5/ 9 13 13 11 7 8 9 8 5 3 77 10/ 14 22 25 28 13 37 49 43 46 20 279 15/ 19 22 26 29 35 52 59 73 61 10 367
1400 -5/ -1	20/24 4 4 5 2 1 4 20 TOTAL 67 71 75 57 98 117 125 114 35 759  ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS (METERS) (C) R E L A T I V E H U M I D I T Y (%) SEASONI FALL (SDN) TIME (GMT)! 12 HR
ALTITUDE AIR TEMP OO 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS (METERS) (C) R E L A T I V E H U M I D I T Y (%) SEASON: FALL (SON) TIME (GHT): 00 HR	FREQUENCY DF WEATHER (CODE) FOR FALL -12 HR 1 2 3 4 9 B TOTAL 54 76 17 562 4 197 910
FREQUENCY OF WEATHER (CODE) FOR FALL -OO HR 1 2 3 4 9 B TOTAL	

26 183 10 234

1 456 910

# TABLE X. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR DENVER, COLORADO

SWYSEC INTEGNAL 00 10 20 30 40 50 60 70 80 90 100 005	eriod: J	AN 1959-DE	C 19	68																	ELV:	1611	. м	39 4	6N, :	04	53
	TITUDE SV SFC	AIR TEMP Interval	R E	10	20	30	40	50	60	1 T	80	90 10	) TOTAL	ALTITUDE ABV SFC	AIR TEMP Interval	R E	10	20	30	40	50	60	70	80	90	()	12 To
149-14	0	-25/-21			,		,		,	1			2	0	-30/-26			1			,						
07		-15/-11 -10/ -6					4	11	7 11	12	8		24 47		-20/ <b>-</b> 16 -15/ <b>-</b> 11					1	5 13	15 17	10	7 16		1	
199   10   1   2   7   35   30   9   1   1   1   1   2   1   1   1   1   1		0/ 4	,	9	9	22			27	18			161		-5/ -1		1	1	6	23	45	63	45	46 38 7	18	7	
TOTAL 5 4 89 109 1131 13 8 59 28 8 652 200 -394-20 1 1 1 2		10/ 14 15/ 19	1	20	35	30	9			·			100		5/ 9 10/ 14			1	6	6	3						
-24/-28	200	TOTAL	5	44	89	109	113	113		59	28	В	652	200	-30/-26		1	7		61				116	42	4	
-107-6   1 2 4 11 11 0 9 7 3 3 77		-25/-21 -20/-16						2	4				3		-20/-16 -15/-11					13	6	5	9	1			
07 6 6 25 66 36 31 16 A 2 106		-10/ -6				4	11	11	9	9	7	3	57		-5/ -1			8	34	34	44	32	22	24	7	1	
19719 6 6 1 1 2 1 4 0 1 5 1 1 1 1 2 1 4 0 1 5 1 1 1 1 2 1 4 0 1 5 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1		0/ 4		15	25	46	36	31		4		,	166 170		5/ 9 10/ 14		1	18	2 B 4	2.2	3	1					
		15/ 19		6	4	1				20		7	11	400	-30/-26		3	42			117		76	47	22	1	
-20/-16	•00	-30/-26		24	128			1	26	28	17	,	1		-20/-10				4		4	4			2		
-57 - 1		-20/-16 -15/-11				1	3	6	9	2	4		27		-5/ -1		6	16	35	33	20	23	18	18			
27 9 30 71 55 12 3		-5/ -1		6	13	34	17	16	15	9			120		5/ 9		4ء	58	49	14		•		2			
TÜTAL 90 167 160 82 60 41 20 20 5 1 652 -200-16 2 2 4 6 1 1		5/ 9 10/ 14		30	71 37	55	12			-			171 86	600	TJTAL -30/-26				162		55			39	15		
-25/-21	.00	TOTAL				160	82	60	41	26	20	5	1 652		-20/-16				2		2	2	4		2		
-107 -6	,	-25/-21 -20/-16						1	7	2			4 14		-10/ -6 -5/ -1		7	13	46	32	30	19	14	15 13	6		
0		-10/ -6		ī	8	19		15	6		7	2	91		5/ 9		41	53	33	39 6	10		3				
157 19		0/ 4		18	44	59	33	7		J	Ū	*	166	800	TATEL						64	48		32	11		
800 -35/-31		15/ 19		2	1		-				٠.	-	3		-20/-16			,		3	3	٤	3		,		
-25/-71	800	-35/-31		80	170	103	94	1	33	21	21	,	1		-10/ -6			10	30	32	11	12	11	15	4	1	
-10/-6		-25/-21 -20/-16				ī	1				2		5 14		0/ 4 5/ 9		4 د	39 45	58 28	29	6		1				
0		-10/ -6		5	6	20	12	10	7	15	10	4	1 90	1000	TOTAL		4. 4			116	48	3 /	3 7	34	10	ī	
15/ 19 1 TUTAL 97 166 159 88 47 31 28 24 9 3 652		0/ 4 5/ 9		24 40	54	59	26	6		·		-	173 143	1000	-25/ <b>-</b> 21 -20/ <b>-</b> 16								3				
1		15/ 19		1			0.0	. 7	2.		3.4	۰	1		-10/ <del>-</del> 6			12	35	2 7	16	15	18	4	6	1	
-25/-21	000	-35/-31		71	100	127		1	21	20	24	,	1		0/ 4 5/ 9		41	55	51	26	9		.0		٠	•	
-107 -6		-25/-21 -20/-16				1	2	1					1 13		TATAL		45	120	170			43	43	19	9	1	
0/ 4 34 63 56 27 9 1 1 1 191		-10/ -6		4	10	24	24	13	11	16	5	3	1 111	1200	-25/-21				6			2			2		
TOTAL 99 152 149 106 54 27 37 19 / 2 652		0/ 4 5/ 9		34	63 42	56	27		1			1	191 98		-15/-11 -10/ -6		6	17	35	34	4 20	8 2 2	8 19	7		1	
-307-26	200	TOTAL		99		149	106	5 4 1	27	37	19	1	2 652		0/ 4		40	58	47	21	2 5	13		1			
-15/-11 1 4 10 16 10 5 13 7 4 70 -20/-16 1 1 7 11 5 2 2 3 1 1 -10/-6 6 16 20 26 21 16 9 4 4 1 123 -15/-11 5 8 20 18 14 14 5 8 1 1 -10/-6 6 16 20 26 21 16 9 4 4 1 123 -15/-11 5 8 20 18 14 14 5 8 1 1 -10/-6 10 1 19 25 45 33 16 13 8 4 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-25/-21					-						1 2	1400	TOTAL -30/-26			121	163	1		45			6	1	
-5/-1 24 33 48 51 17 9 3 1 1 187 -10/-6 11 19 25 45 33 10 13 8 4 0 10 4 39 59 53 19 7 1 1 1 179 -5/-1 34 37 51 39 25 / 6 10 10 1 1 1 2 5 5/9 8 0 2 10 10 1 1 1 2 5/9 8 0 2 10 10 1 1 1 1 1 2 5/9 8 0 2 10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-15/-11			4	10	16	10	5	13	7	4	70		-20/-16		1 5	1		11	5 14	5 14	2	2			
10/ 14 1 1 1 1 2 12 145 117 60 34 26 14 10 2 652 TOTAL 105 115 138 138 84 42 28 20 8 400 -35/-31 102 142 145 117 60 34 26 14 10 2 652 TOTAL 105 115 138 138 139 84 42 28 20 8 -35/-31 1 1 1 1 1 2 1 1 6 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 -20/-16 1 1 2 7 3 4 2 1 1 22 (WETERS) (C) R E L A T I V E H U H I D I T Y 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0/ 4		39	33 59	48 53	51 19		9	3	1	1	187 179		-5/ -1		34	37	25 51	39	33 25			8	4	ī	
100 -35/-31		10/ 14		1		1		60	34	26	14	1.0	2		5/ 9		В	Þ	2			42	28	20	8	1	
-20/-16 1 1 2 7 3 4 2 1 1 22 (METERS) (C) R E LATIVE HUMIDITY -15/-11 2 3 11 18 13 1 9 6 5 78 SEASON: WINTER (DJF) ITME (G) -10/-6 12 20 27 38 26 11 8 9 3 154 -5/-1 24 37 49 51 13 5 4 1 1 145 0/ 4 48 56 43 13 7 1 1 169 FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR 5// 9 15 11 9 35 1 2 3 4 9 8 10TAL 10/14 1 TOTAL 103 128 142 129 63 35 22 19 10 1 652 63 150 14 649 2 2 25 903  ITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL 5FC INTERVAL 09 19 29 39 49 59 69 79 89 99 085  FRESS) (C) R E LATIVE HUMIDITY (%)	+00	-35/ <del>-</del> 31 -30/-26		102	. 74				1	2.0	-		1	ALTITUDE	AIR TEMP	00	10	2 0	30	40	50	60	70	80	90	_	
-10/ -6 12 20 27 38 26 11 8 9 3 154 -5/ -1 24 37 49 51 13 5 4 1 1 165 0/ 4 88 56 43 13 7 1 1 169 FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR 5/ 9 15 11 9 35 1 2 3 4 9 8 IOTAL 10/ 14 1 1 3 128 142 129 63 35 22 19 10 1 652 63 150 14 649 2 25 903  ITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 085  TERSS) (C) RELATIVE HUMIDITY (%)		-20/-16			l 2	2	7	3	4	q	2		1 22	(METERS)	(0)	₽ E	15	29 T	39 1 V I	49 E	59 H U	M I (	יז ס	ΤY	(	% ) T ) :	12
0/ 4 48 56 43 13 7 1 1 169 FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR 5/ 9 15 11 9 35 1 2 3 4 9 8 IOTAL 10/ 14 1 107 14 1 103 128 142 129 63 35 22 19 10 1 652 63 150 14 649 2 25 903  ITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 0BS TERS) (C) R EL A TIVE HUM ID 11 Y (%)		-10/ -6 -5/ -1		12 24	20 37	27 49	38 51	26	11	8	9	3	154 185	25,440,11						<b>.</b> n.c.:							
TOTAL 103 128 142 129 63 35 22 19 10 1 652 63 150 14 649 2 25 903  ITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL  5FC INTERNAL 09 19 29 39 49 59 69 79 89 99 085  TERS) (C) RELATIVE HUMIDITY (%)		0/ 4 5/ 9		48 15	56	43	13	7	1	1			35		FREQUE 1	2	F 48	ДТН	ER (1	UDE	) FO	K Wi!	NTER. B	101/	1R 1L		
ITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 0BS TERS) (C) R E L A T I V E H U M I D I T Y (%) SDN: WINTER (DJF) TIME (GMT): 00 HR		TOTAL		103									1 652		63	150	14	6	49		2	2	5	90	3		
SON: WINTER (DJF) TIME (GMT): 00 HR	SFC	AIR TEMP	00 09	10 19	20 29	30 39	40	50 59	60 69	70 79	80 89	90 1	OO TOTAL OBS														
	SON:	WINTER (DJF	=) ``		- '	. • 1	. '			•	TIME	(GMŤ	): 00 HR														
FREQUENCY OF HEATHER (CODE) FOR WINTER-OO HR 1 2 3 4 9 B TOTAL		FREQUEN	NCY C			ER (1	CODE	) FOF	WIN	TER-	-00 F	IR															

#### TABLE X. - Continued

### (b) Spring

PERIODI	JAN 1959-DE	C 196	8																	ELV	:161	1 H	39	46N,	104	53 W
SEASON: ALTITUD ABV SFC (METERS		R E	L 4 10 19	7 20 29	1 V 30 39	40	H U 50 59	м I 60 69	70	ľΥ	(GMT) (%) 90 100 99	OO HR TOTAL D DB5	SEASONI ALTITUDE ABV SFC (METERS)	SPRING (HAM AIR TEMP INTERVAL (C)	RE	10 19	4 T 20 29	I V E 30 39	40 49	H U I 50 59	4 I 60	70	ΤŸ	E (GM 90 99	%)	TOTAL
0	-15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 TOTAL	7	2 8 37 55 30 3	6 23 46 31 9	1 1 7 8 15 13 7	1 2 7 16 9 6 3	1 1 2 4 17 6 2	9 10 3 6 1 2	5 3 3	4 1 4 3	2	3 5 22 35 61 73 111 105 44 3	200	-20/-16 -15/-11 -10/-6 -5/-1 0/-9 5/-9 10/-14 15/-19 TUTAL -20/-16 -15/-11		1	2 1 5 1 9	1 9 19 13 1 43	1 7 24 26 18 1 77	1 2 3 19 37 29 15 1 107	2	44 33 5 128 2	46 39 21 8 1 142 2	2 6 23 32 25 9	1 2 2	7 20 44 150 240 185 84 5 735
200	-20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 20/-24 25/-29	1 4 1 4 1 2	1 5 13 47 45 21	1 19 36 47 24	1 2 4 14 12 17 13 2	2 3 11 16 7 3	1 5 7 12 6 2 1	1 1 7 6 2 6 1	28446	2 3 1 1	1	1 9 27 48 71 92 114 73 24	400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TUTAL -20/-16 -15/-11 -10/ -6		2 1 3	6 14 18 10 48	1 4	1 3	1 1 4	8 23 42 28 5 108 1 1 6	32 14 7 85 3	25 23 7 83 1 1 5	4 8 13 13 4 42	1 1 3	40 102 215 204 126 33 735 6
400	TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	1 4 3	1 7 19	1 8 19 59 36 17	65 2 1 8 12 20 24 9	42 1 2 2 5 14 10 7 3	34 4 12 11 3	1 1 3 7 5 4 2	6 6 2 5 4	7 1 1 2 2	1 2	462 25 133 56 78 120 95 54 6	600	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1			2 11 35 54 30 6 140	9 42 39 32 14 1 142	14 31 34 19 4 106	17 20 25 10 78 1 2 11 15	17 23 16 6 70 2 4 14	14 20 20 4 1 67 2 1 9	16 17 23 4 67 2 1 9	21 2 2 9	1 2 1	94 175 204 145 60 11 735 5 10 49
600	TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	2 3	1 3 5 23	141 5 10 33 55 37 8	77 1 3 8 12 22 21 6 1	45 1 3 11 15 11 9 2	31 1 1 9 16 4	24 2 3 2 8 4 4 1	23	2 1 2 2	3 1 2	462 1 5 20 44 69 87 116 80 39	800	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1		7 9 14 17 1 48 2 1 3	17 48 46 30 150	41 44 26 11	28 28 11 1 97 2 8 28 34	28 18 9 84 3 8 16 20	26 17 8 71 1 2 5 10 20	17 16 2 57 2 3 18 15	9 18 1 54 2 4 13 11 6	24	2 1 1 1	180 203 118 59 2 735 5 20 47 136 176
800	TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19	1 2 3	3 3 1 3 1 2 2	1 3 21 38 53 27	74 5 8 14 30 23 3	52 1 8 8 14 12 8 1	32 1 1 3 11 11 2 2	1 1 7 5 5 3	25 3 8 3 5 6	7 1 2 4 2 4	1 2 1	462 1 1 7 29 49 76 109 112	1000	0/4 5/9 10/14 15/19 TOTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9		14 15 17 62 3 6	56 49 20 159 1 3 8 32 54	23 3 146 1 9 30 43	29 13 1 115 2 2 12 31 41	16 7 70 1 6 7 15 20 19	12 4 54 4 10 16 17	10 1 52 3 4 21 16	11 47 1 3 11 8 8	5 1 27 2 4 6 6 5		197 113 41 735 1 6 26 60 143 195
1000	20/ 24 TUTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14	1 · 2 · 3 ·	0	2 6 18 43 45 15	83 4 11 18 31 18 2	52 1 2 10 11 20 15 4	32 1 1 3 12 8 7 2	22 3 12 8 5	25 4 5 5 7 4	2 5 2 3 2	5 1 2 1	15 462 1 2 11 31 63 86 127 89 48	1200	10/ 14 15/ 19 TUTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9		22 23 11 76 2 7 15 20	41 11	2 14 29 53 35	9 114 2 4 20 43 41 20	70 1 9 8 24 19	59 1 5 11 10 12 12	54 2 4 8 18 9 3	38 1 1 2 10 8 11 3	23	1 1	181 100 23 735 2 6 36 75 169 208 154
1200	20/ 24 TOTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14	20	5 0 4	3 11 18 37	2 6 15 30 29	1 2 11 15 17 15	1 4 10 7 8 1	28 1 4 6 14 5 3	25 3 10 6 3	14 3 4 1 1 3	3 1 1	4 462 1 2 15 38 84 90 119	1400	10/14 15/19 TOTAL -25/-21 -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9		1 3 14 20 14	5 2 16 47 43	34 64	2 32 1 8 27 40 35	75 1 1 11 13 32 20 11	58 1 1 5 8 17 6	44 2 8 9 12 9 2	36 1 1 5 9 8	23 1 2 5 10 5	2 1 1	78 735 4 8 47 91 184 219
1400	15/ 19 TUTAL -25/-21 -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19	10	2 1 3 5 0 6 1 5	1 12 26 39 25	2 103 3 10 15 42 29 8	7 7 16 22 16 3	31 1 4 2 14 15 3	34 2 1 1 10 12 1 2	25 1 3 6 4 7 3	3 5 5 5	3 1 1	27 462 3 21 44 86 129 109 109	ALTITUDE ABV SFC (METERS) SEASON: S	INTERVAL	00 09 R £	72 ; 10 19 L A	20 29 T I	30 39 V E	н	59 U M		ING-	TIME	25 90 16 99 (%) (GMT)	)	52 735 FOTAL OBS
ABV SFC (METERS)	TOTAL AIR TEMP	00 10 09 19 R E L	0 1 0	08 : 20	30 39 V E	71 40 49 H	40 50 59 U M	29 60 69 I D	79 I T	89 Y	5 90 100 99 (%) (GMT):	462 TOTAL 085		54 1		22	68			5	54		920			

42

FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR
1 2 3 4 9 B TOTAL

3 392 920

52 364 39 70

#### TABLE X. - Continued

PER 100 t	JAN 1959-DE	C 19	68																	ELV	161	м	39 4	6N.	104	53 W
	SUMMER (JJA AIR TEMP INTERVAL (C)		10		30			1 I I 60 69	I 70 79	T I ME Y B 0 8 9	(%	): 00 HF ) TOTAL 00 DBS			RE		20	30	40		4 I E 60 69	70 79	TIME Y 80 89		<b>()</b>	12 HR TOTAL DBS
0	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 35/ 39		1 31 100 8	87	55	2 21 34 1	15 4	3 12 14	17 3	3 3 1	2	10 40 92 214 154	200	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL			2 1 3	8	2 15 58 4 79	46 76 3 128		59 156	20 107 49		9	80 418 327 11 836
200	TOTAL 5/ 9 10/ 14 15/ 19			139		58 12	23 3 15	29 3 13	22 1 5 6	7 1 3 1	2	526 2 15	200	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL			10	41		108 7	3 53 88	5 64 64	16 54 25	10 30 3		42 273 427 94
	20/ 24 25/ 29 30/ 34 TOTAL	4	69	36 106	48 38	39 7 58	18	18	2	5	1	154 213 87 526	400	5/ 9 10/ 14 15/ 19 20/ 24		2 2	16 20 75	16 41 108	22 78 41	21	145 6 32 62	133 9 25 42	95 15 39 10	43 7 19 4		836 45 175 338 259
400	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		20	82	68	2 25 40	1 7 14 11	5 5 1	1 8 3	2 4 1	1	29 82 222	600	25/ 29 TOTAL 0/ 4 5/ 9		5	13	1		119	100	76 11	64 2 15	30 2 6	1	19 836 4 57
600	30/ 34 TOTAL 0/ 4 5/ 9		86 16 124	76 1 171		1 68	33 1	11	12	7 1 2	1	172 17 526 1 8		10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		9 29 1 39	29 92	73 76 1	23 103 28	81 2	33	37 15	33	16	1	197 349 227
	10/ 14 15/ 19 20/ 24 25/ 29		5 33 62	102	3 41 59 3	36 27	12 23 3	8 6 1	7 2	6	•	40 139 225 112	800	0/ 4 5/ 9 10/ 14 15/ 19		1 14	7	172 10 22 121	7 34	7 37 50	79 1 12 38 23	63 1 15 37	52 2 15 22	24 2 14 9	1	836 7 82 207 388
800	30/ 34 TOTAL 0/ 4 5/ 9 10/ 14		101	175	1	67 1	39	15	13	9	1 1 3	1 526 2 14	1000	20/ 24 TOTAL 0/ 4 5/ 9		26 41	78 140 2	40 193 9	169 1 10	94 17	74 1 18	58 3 20	39 2 15	25 5 14	3 1 2	152 836 13 107
	15/ 19 20/ 24 25/ 29 TDTAL		38 36	39 111 16 170	45	7 49 14 71	15 28 1	10 7	10	5 1	4	55 194 209 52 526	1200	10/ 14 15/ 19 20/ 24 TOTAL 0/ 4		26 21 50			55 96 162	34 39 90 2	45 9 73 3	21 44 5	39	24	3	230 398 88 836
1000	0/ 4 5/ 9 10/ 14 15/ 19		1 13	5 57	2 19 75	3 20 49	1 24 24	5 12 8	3	3 7 3 1	1 3 1	24 91 227	1200	5/ 9 10/ 14 15/ 19 20/ 24			1 25 107 14	12 69 116	20 81 73	17 55 18	32 44 3	10	5 23 14	5 7 2	1	24 123 316 353 20
1200	20/ 24 25/ 29 TOTAL 0/ 4		50 6 70	90 2 154	27 123	5 77 1	49	25	9	14	5	172 8 526 6	1400	TOTAL 0/ 4 5/ 9 10/ 14		45	147 1 51	200 3 19 105		92 5 32 79	82 5 25 27	35 9 21 11	42 9 16 6	14 6 5	3 1	836 45 150 401
	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		2 15 30 47	14 82 52 148	11	2 38 51 1 93	29 17 52	10	7 4 1	12	4	37 148 241 94 526	ALTITUDI	15/ 19 20/ 24 TOTAL E AIR TEMP	00	29 1 45	90 142 20	201			58	41	31	12	4	239 836
1400	-5/ -1 0/ 4 5/ 9 10/ 14		6	1 26	9	1 10 51	1 10 34	13	104	2 2 7 1	3	2 8 1 61 210	ABV SFC (METERS	INTERVAL	09 R E	19	29	30 39 V E	40 49	50 59 1 U M	60 69 I D			99 (%	1	TOTAL OBS 12 HR
	15/ 19 20/ 24 TOTAL			18 129		32 94	50	40	15	12	4	216 29 1 526		FREQUEN	1C Y D	F WE	ATHE	R (0	ODE	FDR 9	SUM B		12 HI Totai			
ABV SFC (METERS)	AIR TEMP INTERVAL (C) SUMMER (JJA		10 19 L #	20 29 1 T I	30 39 V E	40 49 H	50 59 U M	1 D			99	DES TOTAL		23	55	2	79	1		4	45		92	0		
	FREQUEN	CY 0	F WE	ATHE	R (C)	0DE )	FOR 9	5 UMI 8	ER-	00 H																

#### TABLE X. - Concluded

#### (d) Fall

SEASON:	E AIR TEMP Interval	1) R	E L 10	20	30	40	50	1 1 6 60 69		TIMI T Y 80 89	- (	(T): (%) 100	OO HR TOTAL OBS	SEASON: F ALTITUDE ABY SFC (METERS)	FALL (SON AIR TEMP INTERVAL (C)	RE	L # 10 19	T 20 29	30	40	н U . 50	н I н 60	1 0	TIM	(	T):	53 W 12 HR TOTAL DBS
o	-15/-11 -10/-6 -5/-1 0/-4 5/-9 10/14 15/-19 20/-24 25/-29 30/-34	3 6 11 4	9 22 41 49	47 55 35	35 23 6	2 6 17 23 10 8 2	2 1 8 16 9 6 3	1 6 2 8 5 4	10 8 5 4 2	1 4 11 4	3		1 3 27 39 68 115 130 137 103	200	-20/-16 -15/-11 -10/-6 -5/-1 0/-4 5/-9 10/-14 15/-19 TOTAL -15/-11 -10/-6		1 1 2	3 6 3 1 13	1 7 19 14 5	14 37 26	44 36	2 20 47 43 26 2 140	1 4 9 37 58 32 22 1 164	6 14 38 37 33 26 3 157	2 2 17 7 12 7	7 5 1	12 29 131 213 228 162 24 800 5
200	35/ 39 TDTAL -20/-16 -15/-11 -10/ -6	24	137	178	113	68	45 1 1	26 1	30	21	3		645 1 1 7		-5/ -1 0/ 4 5/ 9 10/ 14		1 2 1	3 11 20	11 29 45	1 30 65	14 33 52	13 46 27 22	12 23 20 16	21 15 15	5 6 11 5		70 168 232 212
	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	3	2 9 29 53	66 58	41 32 16	3 15 20 23 10	7 8 11 3	1 5 6 3	7 8 4 1 2	5 4 2 3	2 2		28 46 70 136 145 140	400	15/ 19 20/ 24 TOTAL -15/-11 -10/ -6 -5/ -1		6	10 3 47	30 1 120 1 4	27 176 1 6	14 152 2 6	5 118 1 9	75 1 5 6	77 3 6	1 29 1 8		91 800 4 17 53
400	25/ 29 30/ 34 TOTAL -20/-16 -15/-11	4	38 4 135	1	117	77	39 1	20 1	26	16	4		66 5 645 1		0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		2 9 20 15 9	66 66 15	18 41 60 46 12		23 31 21 2	19 13 11 9	20 13 10 1	8 10 5 2	6 11 2	1 1	123 180 225 161 37 800
	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34		6 21 42 51 15	1 18 49 70 57	1 4 12 21 54 26 7	2 10 16 16 10 4	2 3 11 8 7 4 2	6 5 5 2 1	6 4 3 3 1	3 7 2 2 2	2 2 1		15 27 54 80 157 155 122 30	600	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		1 1 13 24 21	8 8 32 74 60	26 44 68 41	6 23 33 29	3 9 20 25 20 3	5 6 23 10 12 8	5 7 12 14 6	1 3 8 10 8	1 3 9 4 5 2	2	1 2 21 58 127 186 240
600	TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1		138	2	126	60 2 6	38 2 4	24 1 1 5	20 3 3	16 7 7	6	1	645 1 2 15 38	800	20/ 24 TUTAL -20/-16 -15/-11 -10/ -6		64	8 190	193 2	102	80	64	45 1	35 3 3	24 1 6	3	21 800 1 4 28
	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		12 28 43 36	13 26 63 64 49	13 27 46 25 7	8 23 14 9	11 8 10 5	8 1 3	2 5 4 1	1 3	1		58 113 166 150 93		-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 21 28 16	6 16 49 79 50 4	8 21 52 65 31 4	8 26 31 28 10	12 16 25 21 4	9 17 15 8 1	14 12 1	9 8 8 3	6 4	1 .	62 128 220 233 112 12
800	TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		1 3 19 34 43	218 12 24 71 66	1 9 11 46 45 23	63 2 9 8 22 17 4	2 2 5 12 12 9 6	1 3 11 3 2	18 1 3 4 6 2 1	1 8 5 2 2	3 3 1 1	2	645 1 4 20 44 64 135 182 145	1000	TJTAL -20/-16 -15/-11 -10/-6 -5/-1 0/4 5/9 10/14 15/19		4 8 25 27	7 23 65 75 33	183 5 9 26 45 64 28	107 4 11 34 24 33 11	82 1 8 12 23 23 9	1 3 11 13 15 5	34 1 2 5 12 10 1	34 5 9 8 7 2	5 6 7 3	1	800 1 7 33 74 154 220 216 91
1000	20/ 24 25/ 29 TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1		12 3 115	29 2 208	3 139 1 3 11	1 63 1 2 10	48 2 1 4	23 1 1 8	20	19 3 11 6	8	2	45 5 645 1 7 24 49	1200	20/ 24 TOTAL -20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4		1 83 a 1 6	2 2 8 2 3	1 178 6 15 31	118 1 5 14 41	77 3 9 12 23	48 1 6 9 21	31 1 1 8 9	35 3 6 10 8	21 4 5 4	4 1 1	800 1 9 41 87 176
	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		9 25 36 34 8	14 39 61 54 10	11 51 49 28	15 24 13 2	10 15 9 2	7 5 5 2	5 3 3	3 3 1	2 3	1	76 168 177 122 21 645	1400	5/ 9 10/ 14 15/ 19 TOTAL -20/-16 -15/-11		27 28 9	74 64 19	58 63 10	32 31 5 129	23 6 76	14 3 54 2	30 1	7 34 3	15	3	244 199 43 800 1
1200	-20/-16 -15/-11 -10/ -6 -5/ -1 0/ 4 5/ 9		3 9 34	1 6 16 57	5 12 21 53	2 2 11 27 32	2 1 7 5	1 8 12 5	5 6 3	4 12 3 2 6	4 2 3		2 7 26 57 101 202		-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		19 30 26 4	1 10 29 76 50	6 15 47 61 53	9 23 40 41 28 3	10 17 29 18 8	16 16 10 3	5 9 7 1	4 9 8 2	5 3 3	1	46 109 201 248 169 15
1400	10/ 14 15/ 19 20/ 24 TOTAL -20/-16 -15/-11			55 38 2 175	1	16 2 92 1 2	33	8 34 1	16	27 5	9 1 6		160 84 6 645 2 10	ALTITUDE ABV SFC (METERS) SEASON: FA	INTERVAL	00 09 R E	19	20 29	30	40 49 H	50 59 U M	51 60 69 I D	28 70 79 I T		99 (%	)	800 OTAL OBS
	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 4 17 33 25 10 2	59 52	8 62 62 49 14	7 12 24 27 11	1 5 15 12 4	8 7	8 5 4 2	6 5 3 2	2 4		56 142 207 150 40			Y DF 2	3		+	QDE)	ĖOR 9 5	FALI B		12 HF 1014 910			
ALTITUDE ABV SFC (METERS) SEASON:	TOTAL  AIR TEMP INTERVAL  (C) FALL (SON)	00 09 R E	92	161		85 40 49 H		33 60 69 I D	70 79 1 T	21 80 89 Y	90 1 99	.00 T	645 TOTAL OBS														
. 200-01	FREQUENC		F WE		R (C	DDE)	FOR	FALL B	(		ı																
	26 2			20				439		910																	

TABLE XI. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR SAN DIEGO, CALIFORNIA

PERIOD: 3	AN 1959-DE	C 196	. 8																		ELV:	124	м	32 4	9N,	117	08 W
	INTER (DJF AIR TEMP INTERVAL (C)	10	20		40			) I T		( %	; )	OO HR TOTAL OBS	SEASON: V ALTITUDE ABV SFC (METERS)	WINTER (DJF AIR TEMP INTERVAL (C)	RE			30 39		1 U M 50 59	I D 60 69	1 T 70 79		ţ	% )	12 HR TOTAL OBS	
0	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29 30/ 34		1 5 3	1 16 45 12	1 43 46 8	1 19 67 36		36 118 3	33 107	13 26	7 4 1		2 134 456 147 25	0	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL			1 2 1 4	2 6 10 1	19 11 2 36	5 36 15	10 42 18	19 78 30	27 92 59	20 177 105 1	2 s 1 ? 4 2	87 474 269 7 838
200	TOTAL 5/ 9 10/ 14 15/ 19 20/ 24		9 1 11 14	76 9 46 63	3 26 74 27	123 5 37 65 7	111 3 51 54 1	157 5 87 35	82 11	39 2 26 5	12 7 1		766 18 326 302 112	200	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 2 5 6 2	6 24 15	9 47 30	20 63 25	2 35 49 11	28 56 6	53 72 2	1 100 80	27 57		6 280 453 95 4 838
400	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14		1	7 125 1 45	131 135 45	114 12 36	109 21 26	127 28 53	93 26 67	33 9 36	8 1 6		8 766 1 104 328	400	70TAL 0/ 4 5/ 9 10/ 14 15/ 19		16 7 22 34	46 8 41 90	1 16 63 51	109 19 34 29	1 23 30 7	27 31 2	64 35	181 86 34	24 33	1	274 324 213
	15/ 19 20/ 24 25/ 29 TOTAL		37 42	107 48 1 202	51 9		5 5	87	95	47	7		232 100 1 766	600	20/ 24 TOTAL 0/ 4 5/ 9		9 73 1 9	7 146 2 8	137 1 30	84 17	61 4 21	60 5 30	72	120 83	57 30	1	23 838 20 300 270
600	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 38 79 30	10 52 123 22	11 44 28 2	17 25 5	3 28 34 3	2 45 33	55 30 1	17 19	2 1	1	8 187 276 239 55	800	10/ 14 15/ 19 20/ 24 TOTAL -5/ -1		35 78 18 141	75 82 6 173	1	30 13 60	34 3 62	59	15 93	12 96	36	1	218 30 838 1
800	25/ 29 TOTAL -5/ -1 0/ 4 5/ 9	1	149	207	87 1 1 22	49 3 17	68 3 32	80 9 32	86 3 51	36 3 33	<b>3</b> 7	1	766 1 23 221		0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 13 48 88 15	3 33 81 79 5	24 63 30	27 33 7	20 16 2	26 12	17 34 10	12 65 7	7 33 3	1	61 276 273 206 21
	10/ 14 15/ 19 20/ 24 TOTAL		52 106 18	69 98 14 203	18 2 88	35 5 60	23	17	61	47	7		258 229 34 766	1000	TOTAL -5/ -1 0/ 4 5/ 9		165 23	45	122 1 5 32 56	71 27	43 1 12 13	47 1 14 25	61 26 31	84 35 41	43 8 14	1	638 3 119 253 281
1000	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19	1	2 23 72 104	1 33 75 79	2 23 50 12	1 11 24 26 2	13 27 16	16 34 9	1 14 29 6	10 18 6	2 4 1		71 215 261 198	1200	10/ 14 15/ 19 20/ 24 TOTAL -5/ -1		89 9 203 1	100 57 2 210	21 115	20 58 2	11 37 1	45	6 6 3 5	80	2 24 1		171 11 838 13
1200	20/ 24 TDTAL -5/ -1 0/ 4 5/ 9		11 212 3 43	7 195 2 48	1 88 14 41	64 2 14 25	57 1 17 28	59 1 16 19	50 3 11	34 1 21 12	7 3 5		19 766 8 101 232		0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		7 33 107 74	12 68 92 39	5 45 51 8	18 36 14 1	13 19 13	18 13 3	24 17 2	45 15 2	12 10 1	2	156 258 285 122
	10/ 14 15/ 19 20/ 24 TOTAL	ā	91 80 3	86 52 1 189	54 10	17 1 59	14	1 ó	28	36	í 9		278 143 4 766	1400	TOTAL -10/ -6 -5/ -1 0/ 4		1 1 1	211 20 77	110 3 14 47	71 1 3 21	46	35 2 17	10 24	63 6 38 7	24 1 14	2	838 1 31 173 258
1400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14	1	1 5 69 124	1 10 68 81	19 38 38		1 19 16 6	19 17 3	15 8 2	18 9 1	3 3 2	1	1 17 124 252 282		5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		54 138 55 2 261	87 18	43	33 12 1 71	10 7 33	32	12 2 48	53	20	•	295 78 2 838
A. T.T.U.S.	15/ 19 20/ 24 TOTAL	ā	49 1	32 192 20	6	66 40	1 45 50	43 60	1 29 70	32 80	8	1	89 1 766 TOTAL	ALTITUDE ABV SFC (METERS)	INTERVAL	09 R E			30 39 I V	40 49	50 59 H U M	60 69 1 I C	70 79 1		99	<b>*</b> )	TOTAL OBS
ABY SEC (METERS)	INTERVAL		39	49	59	69		89 T Y	99	x I	OO HR	26800141	FREQUEN		ıF We		ER (	CODE	) FOR	E MIN 3			4R				
	FREQUEN	CY 01	F WE		ER (1	CODE	) FOF	k WI	NTER-	-00 H	IR L				39	14	10	7	87		2	5 3	ı	90	3		
		1	32	3	90	3																					

#### TABLE XI. - Continued

### (b) Spring

PERIOD: .	JAN 1959-DE	C 196	8																		ELV:	124	+ M	32	49N,	117	08 W
SEASON: S ALTITUDE ABV SFC (METERS)	SPRING (MAH AIR TEMP INTERVAL (C)	R E 00	L A 10 19	7 1 20 29	30	40 49		4 I I 60 69	70 79		(	T): %) 100	OO HR TDTAL DBS		SPRING (MA) AIR TEMP INTERVAL (C)				30 39		1 U P 50 59		70	ΤY			12 HR TOTAL OBS
0	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34		1 3	11 16 1	10 18 10	3 20 31 6	70 52 1	14 205 54	8	12	1		43 429 174 34	0	0/ 4 5/ 9 10/ 14 15/ 19 TOTAL			2 2	1 1 1 3	2 5 7 4	5 15 2 22			2 63 194 49 308 77	211 19 325	31 31 33	3 185 558 103 849 159
200	TDTAL 5/ 9 10/ 14 15/ 19 20/ 24		5	30 2 9 18	38 3 24 37	10 45 27	128 2 36 73 21	273 80 93 3	67 70	15 22 8	3		684 2 223 322 111	200	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		1	3 5 8	6 13 2 21	11 10 25	3 22 14 1 40	47 1	118 25	271	17 86 2		551 135 4 849
400	25/ 29 30/ 34 TDTAL 5/ 9		5 10	14 1 44	5 69 1	1 83 4	132	176	12	30 3 51	3		25 1 684 43	400	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		4 10 7	2 7 25 22 2	13 28 21	15 28 5	8 32 16 4	15 26 14 2	76 49 4	110 157 1	50 84 1	ţ	268 388 127 61
	10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		2 7 19 13	40 44 8	14 36 18	14 27 13 58	38 25 2	9	153	54	8		372 152 96 21 684	600	707AL 0/ 4 5/ 9		22	58 2 11	67 5	52 1 4 28	60 9 32	57 1 28 62	4	268 1 131 50	135 58 24	1	849 7 331 287
600	5/ 9 10/ 14 15/ 19 20/ 24		5 21 39	2 14 59 30	4 17 30 21	9 29 23 4	18 62 29	33 57 13	41 60	17	5		129 271 175 95	800	15/ 19 20/ 24 25/ 29 TOTAL 0/ 4		21 16 3 49	30 1 88	21 17 1 63	30 6	15 3	11 1 103	153	182	82	1	146 73 5 849 55
800	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14		1	110 3 34	72 1 9 46	1 8 30	22 28	104 3 32 21	42 16	40 1 47 7	9 16 3		684 8 180 191	800	5/ 9 10/ 14 15/ 19 20/ 24		5 7 37 22	7 40 62 33	7 32 53 16	14 36 27 5	14 13 9	12 28 2		126 10 1	93 8	1	333 188 192 76
1000	15/ 19 20/ 24 25/ 29 TOTAL 0/ 4		37 42 8 94	72 37 6 152	47 20 2 125 2	25 1 65 5	5 55 4	2 58 4	61 12	55 7	19		189 100 16 684 35	1000	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14		7 72 7 25	145 15 59	109 1 14 27	82 4 16 26	39 3 15 21	46 7 31 18	89 42 68 12	160 57 69 7	106 11 27 3	1 2	849 125 264 198
1000	5/ 9 10/ 14 15/ 19 20/ 24		2 20 72 51	11 54 77 32	13 40 33 9	8 23 8	22 17 5	33 16 1	38 9 1	29	12		168 181 197 92		15/ 19 20/ 24 25/ 29 TOTAL	;	67 31 4 134	65 29 168	37 13 92	9 1 56	3 42	58	123	133	41	ż	184 74 4 849
1200	25/ 29 30/ 34 TOTAL 0/ 4 5/ 9		2 6	5 1 181 2 18	97 7 13	44 8 16	48 7 16	54 10 19	60 16 11	38 15 12	12 5 10		10 1 684 72 121	1200	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		8 42 74	4 18 74 73	4 34 47 37	8 21 46 7	28 23 3	16 23 12	47 18 4	59 18 1	26 12 1	3	169 183 250 194
	10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		34 77 39 2	90 76 32 3	39 23 7 89	26 10 60	20 2	9 38	29	27	15		220 188 78 5 684	1400	20/ 24 25/ 29 TUTAL -5/ -1 0/ 4	:	21 3 148	21 190 7	126 1 7	83 2 7	58 10	51 1 29	70 10 33	80 9 56	39 4 18	•	46 3 849 27 171
1400	-5/ -1 0/ 4 5/ 9 10/ 14	-	4 19 74	8 33 77	13 15 46	2 16 7	10 11 12	1 16 6 4	2 23 10	16	5	1	3 98 120 220		5/ 9 10/ 14 15/ 19 20/ 24		24 88 90 13	33 89 62 12	39 53 29	19 24 4	19	2	10	9	1	1	168 270 185 26
	15/ 19 20/ 24 25/ 29 TOTAL		85 29 1 12	74 17 2 211	30 2 106	27	34	27	35	23	8	1	192 48 3 684	ALTITUDE ABV_SFC	25/ 29 TOTAL AIR TEMP INTERVAL	00 09	10 19	203 20 29	30 39	56 40 49	38 50 59	41 60 69	57 70 79	74 80 89	99		849 TOTAL OBS
ABV SFC (METERS)	AIR TEMP INTERVAL (C) PRING (MAM	09 R E	10 19 L A	20 29 T I	30 39 V E	40 49 F	50 59 1 U M	60 69 I D	70 79 I T	80 89 Y TIME	99	* )	DBS OO HR	(METERS) SEASON1 S	(C) PRING (MAM) Frequen	.)			V E		U M			TIME	(GM	%) †)1	12 HR
	FREQUEN	רט ח-	wr	ATHE	R 15	one v	E D.0	SoR	ING-	.00 H	R				PREQUEN 1	2	3		4	1051	9	8		TOTA			
	1	2	3		4	3021	9	В		TOTA	i.				44	14	10	74	6		3	103		92	:0		

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#### TABLE XI. - Continued

PERIODI JAN 1959-DEC 1968			ELV: 124 M 32 49N, 117 08 W
SEASON: SUMMER (JJA) ALTITUDE AIR TEMP R E L A T I V E ABV SFC INTERVAL 00 10 20 30 (HETERS) (C) 09 19 29 39	TIME (GMT): 00 HR H U H I D I T Y (%) TOTAL 40 50 60 70 80 90 100 DBS 49 59 69 79 89 99	SEASON1 SUMMER (JJA) ALTITUDE AIR TEMP R E L A T I V E ABV SFC INTERVAL 00 10 20 30 40 (METERS) (C) 09 19 29 39 49	
	7 34 37 19 97 34 57 32 91 99 3 234 10 2 22	0 5/ -9 10/ 14 15/ 19 1 20/ 24 TUTAL 1	4 2 40 39 2 87
TOTAL 3 17 200 10/ 14 15/ 19 20/ 24 19	45 146 446 128 26 811 1 6 79 91 22 1 200 80 105 147 39 4 394 69 36 5 186	200 5/9 10/14 15/19 20/24 2 25/29 1	1 1 2 99 61 173 9 35 92 236 114 486 2 27 72 79 31 3 214
400 10/14 15/19 1 4 20/24 17 44 49	1 10 51 147 237 137 34 1 811 1 3 12 50 36 6 108 8 24 81 89 27 1 235 62 64 41 6 2 288	T0TAL 3 5/9 10/14 1 1 15/19 2 3 7 20/24 7 16 35 44	3 38 110 184 366 179 880 1 2 3 1 1 2 20 138 121 5 290 7 20 34 52 91 64 2 275 7 43 57 29 9 240
30/ 34 5 4 TOTAL 62 114 88 600 5/ 9 10/ 14 1	23 8 171 94 102 134 145 65 7 811 2 3 2 7 7 2 7 15 33 14 2 74 32 74 45 16 5 1 183	25/ 29 3 18 16 17 30/ 34 2 3 TUTAL 10 38 58 69 50 5/ 9 10/ 14 15/ 19 1 14 16	7 70 100 101 239 187 8 880 1 5 11 8 1 26 3 25 35 49 17 129
20/ 24 27 55 67	94 66 19 3 331 23 3 204 12	20/ 24 14 31 53 70 25/ 29 11 28 28 22 30/ 34 4 2	) 69 48 16 3 304
10/ 14	3 8 3 10 11 1 38 24 20 10 8 1 1 101 54 28 9 3 343 16 4 1 290 18	10/ 14 2 2 9 15/ 19 3 19 30 20/ 24 38 112 123 90 25/ 29 34 65 37 25 30/ 34 6 5 1	7 12 8 11 25 11 80 2 25 14 8 3 134 3 47 24 8 1 443
1000 5/ 9 10/ 14 1 2 1 15/ 19 12 13 24	97 61 25 30 18 5 811 1 1 3 10 7 1 23 5 6 5 8 3 31 19 13 3 5 1 90 42 18 7 1 324	TOTAL 81 203 194 156 1000 .0/4 5/9 1 10/14 1 4 5 9 15/19 13 25 18 26	90 46 28 55 22 3 880 1 2 11 22 6 1 43 9 19 17 5 1 70
30/34 14 5 TOTAL 278 226 130 1200 5/9 1 10/14 1 4 5	14 3 1 324 81 41 19 24 11 1 811 1 2 6 7 6 2 25 8 2 3 3 2 28	20/ 24 125 117 78 52 25/ 29 92 77 43 14 30/ 34 7 3 1 TUTAL 238 226 146 101	2 28 13 5 418 3 4 230 11 1 55 42 37 27 7 1 880 1 4 1 6
20/ 24 136 100 69 25/ 29 105 115 52 30/ 34 4 1 TOTAL 265 251 157	12 6 2 1 101 39 23 6 1 374 5 1 278 65 34 17 12 8 2 811	5/ 9 1 1 10/14 3 9 14 15/19 26 40 39 30 20/24 148 131 86 43 25/29 65 72 33 13	4 8 2 1 1 42 0 14 5 2 156 3 35 8 4 455 183
20/ 24 168 114 81	2 4 5 6 5 1 27 2 2 1 1 23 11 5 2 2 114 47 25 5 1 461	30/ 34 5 1 TOTAL 244 248 167 101 1400 0/ 4 1 5/ 9 1 1 2 10/ 14 4 8 4 9	1 1 6 4 12 2 3 1 4 8 4 1 25 3 4 3 1 33
ALTITUDE AIR TEMP OO 10 20 30	4 201 3 64 36 14 12 6 1 811 40 50 60 70 80 90 100 TOTAL	15/ 19 58 49 29 16 20/ 24 184 123 99 45 25/ 29 56 52 23 3 30/ 34 3 TUTAL 306 233 155 76	5 31 10 3 495 3 1 135 3
(METERS) (C) RELATIVE SEASONI SUMMER (JJA)	49 59 69 79 89 99 GBS H U M I D I T Y (%) TIME (GMT): 00 HR	ALTITUDE AIR TEMP 00 10 20 30 40 ABV SFC INTERVAL 09 19 29 39 49 (METERS) (C) R E L A T I V E SEASON; SUMMER (JJA)	
FREQUENCY OF WEATHER (CC 1 2 3 4	9 B TOTAL	FREQUENCY OF WEATHER (CODE	
6 102 789	1 22 920	1 2 3 4 35 3 1 865	9 B TOTAL 1 15 920

#### TABLE XI. - Concluded

#### (d) Fall

PERIOD: JAN 1959-DEC 1968	ELV: 124 M 32 49N+ 117 08 W
SEASON: FALL (SON) THE (GHT): 00 HR ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (\$\frac{x}{2}\) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASON: FALL (SDN) ALTITUDE AIR TEMP RE LATIVE HUMIDITY (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 BBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99
0 10/14 1 1 1 3 1 2 2 11 15/19 1 6 8 21 56 87 20 1 200 20/24 1 4 17 14 54 191 104 5 390 25/29 4 17 24 16 40 21 3 1 126 30/34 1 7 9 11 5 1 34 35/39 4	0 0/4 1 1 1 1 1 4 4 7 1 1 1 1 1 1 1 1 1 1 1
TOTAL 1 12 35 59 44 117 271 195 28 3 765 200 10/14 1 4 6 10 10 4 3 38 15/19 5 13 18 35 98 123 25 1 318 20/24 4 13 31 64 65 55 30 5 267 25/29 14 29 38 30 7 118 30/34 6 8 4 3 21	TOTAL 3 6 17 34 34 35 90 244 359 46 866 27 9 2 3 2 6 6 19 10 10 14 7 4 12 16 23 42 114 54 272 15/19 2 20 11 24 27 46 87 160 74 451 20/24 2 12 12 11 24 29 20 1 2 113 25/29 1 5 2 2 1 1 11
35/39 1 1 1 3 3 3 4 765 400 57 9 1 1 1 2 1 1 3 163 163 34 4 765 400 57 9 1 2 1 1 5 163 163 163 163 163 163 163 163 163 163	TUTAL 4 40 32 51 72 101 155 281 130 866 57 9 1 3 6 3 8 21 107 14 2 6 9 10 9 16 57 143 76 2 330 157 157 19 11 22 25 18 27 33 32 51 46 3 268 207 24 18 46 34 31 26 5 3 1 1 165 257 29 17 30 13 10 3 1 74 30/34 2 5 1 8
23/27 7 4 1 122 35/39 1 1 2 25 TOTAL 83 130 84 80 67 87 157 66 11 765 600 5/9 1 1 3 3 3 3 14 10/14 2 8 11 11 18 28 57 21 3 159 15/19 10 19 25 44 64 44 34 13 1 234 20/24 33 69 53 25 13 4 2 159	TÜTAL 50 110 82 69 68 61 95 203 123 5 866 600 0/4 1 1 2 2 2 11 16 2 37 10/14 15/19 20 26 28 30 43 73 34 15 9 278 20/24 33 49 38 35 17 9 2 1 184 25/29 36 25 20 9 1 91
25/29 62 37 21 8 2 130 30/34 5 2 1 8 35/39 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	30/34 3 4 1 TUTAL 95 118 98 84 83 115 99 127 47 866 800 0/4 1 5 5 6 15 33 13 84 5/9 4 3 5 5 6 15 33 13 84 10/14 10 13 12 14 18 19 28 59 36 209 15/19 33 53 64 39 26 14 6 5 5 245 20/24 52 86 50 29 9 3 2 1 232
15/19 18 51 37 37 29 15 9 4 200 20/24 53 89 58 27 7 4 1 239 25/29 62 46 11 7 3 129 30/34 4 3 1 8 8 10100 0/4 1 2 1 1 1 6 5/9 3 7 5 4 10 12 8 3 52	25/29 36 30 16 4 1 87 30/34 3 2 TOTAL 134 189 145 91 59 44 52 98 54 866 1000 0/4 1 1 3 1 5/9 5 7 6 8 13 23 35 10 107 10/14 17 17 18 13 14 25 42 31 13 1 191 15/19 61 73 45 25 17 9 3 5 1 239
10/14 13 15 13 14 20 24 27 16 2 144 15/19 42 71 40 24 17 14 4 2 214 20/24 89 88 27 23 8 4 239 25/29 57 34 7 5 3 106 30/34 2 2 4 4 27 5 765 1200 0/4 1 1 1 3 1 1 8	20/ 24 105 88 28 16 7 4 1 249 25/ 29 37 25 7 2 1 72 30/ 34 2 7014L 222 208 106 62 47 52 72 72 24 1 866 1200 -5/ -1 1 1 2 2 3 5 3 17 6/ 4 1 3 2 3 5 3 17 5/ 9 5 5 13 10 15 7 21 21 13 1 111
1200 0/ 4 1 1 1 3 1 1 8 5 5 9 1 7 8 8 8 6 6 13 13 4 68 10/ 14 19 18 21 24 18 15 13 7 2 137 15/ 19 58 78 46 32 15 5 4 238 20/ 24 100 67 35 20 6 5 253 25/ 29 29 20 9 2 60 30/ 34 1	10/14 18 26 35 21 16 20 14 14 9 173 15/19 79 89 56 29 15 4 5 2 1 280 20/24 111 71 33 12 6 5 1 239 25/29 20 16 7 1 4 44 170 233 208 145 73 55 38 45 42 26 1 866 1400 -5/-1 1 3
TÜTAL 207 211 120 87 48 34 31 21 6 765  1400 -5/-1 1 1 2  0/ 4 2 1 1 4 5 2 4 1 20  5/ 9 7 11 10 4 6 9 14 7 3 71  10/ 14 32 28 21 19 12 12 10 6 2 142  15/ 19 85 90 56 22 10 5 3 271	0/4 2 5 3 5 3 8 6 5 37 5/9 10 8 16 7 6 12 17 21 8 1 106 10/14 48 36 28 21 15 8 10 9 6 181 15/19 118 98 51 17 9 8 4 3 308 20/24 105 58 20 14 7 3 1 208 25/29 9 8 5 1 T0TAL 290 210 126 63 42 35 41 39 19 1 866
25/29 15 13 6 1 35 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 0BS (METERS) (C) R E L A T I V E H U M I D I T Y (%) SEASONI FALL (SDN)
SEASON: FALL (SQN) TIME (GHT): 00 HR	FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR 1 2 3 4 9 B TOTAL
FREQUENCY OF WEATHER (CDDE) FOR FALL -OO HR 1 2 3 4 9 B TOTAL	29 4 1 822 10 44 910
13 117 5 636 10 129 910	

# TABLE XII. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR OAKLAND, CALIFORNIA

PERIOD: .	JAN 1959-DE	C 1968																		£LV:	6	м	37 4	4N, 1	22 1	.2 ₩
SEASON: A ALTITUDE ABV SFC (METERS)	WINTER (DJF AIR TEMP INTERVAL (C)	R E L	A T 20 29	30	40	50 59	60 69	IT	Υ .	(GMT (% 90 1 99	: 1	OO HR TOTAL OBS	SEASON: ALTITUDE ABV SFC (METERS)	WINTER (DJF AIR TEMP INTERVAL (C)	R E	10	20	V E 30 39	40	1 U M 50 59	I D 60 69	I T	во	( )	. 1	TOTAL
o	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		11	26 20 6	2 42 37 3	40 1	15 107 46 2 170	20 87 28	1 16 47 10	9 9 4		1 74 375 197 18 665	0	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL			4	1 5 9 1	4 5 3 2 14	10 3	10 32 6	15	1 62 163 69 2	50	1 /	3 163 423 159 5 753
200	TDTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	:	3 5	23 38	22 62	33 65 16	1 31 93 15	1 1 33 68 8	17 19 4	6 10		1 2 173 375 109	200	+5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		1 1 1 3	1 6 14 2 23	1 17 14 6	1 27 26 2 57	8 56 31 3	7 64 36 1	13	9 121 58 6	4 43 27		1 45 429 257 21 753
400	TOTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19	:	2 3 6 2 5 1	2 38 54	116 1 36 67	114 1 41 60 8	140 1 2 36 54 5	111 48 40 4	40 21 20 1	16 10 10		665 1 8 235 331 87	400	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TOTAL		1 4 2 7	3 16 10 1	1 5 29 33 8 76	8 42 41 9	5 64 57 2 128	13 53 34 1	7 75 42 4 128	8 84 30 2	4 34 22 60	1	1 54 397 272 29 753
600	20/ 24 TOTAL -5/ -1 0/ 4 5/ 9 10/ 14		1 2 7 43 3 15 5 49	126 4 31 65	127 9 32 50	3 31 28	98 1 13 45 25	92 1 49 36	42 1 43 14	20 10 10	2	3 665 1 33 261 283	600	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TUTAL		1 6 7 18	8 25 34 12 79	13 37 63 22 135	1 9 51 39 11 111	13 39 32 2 86	2 10 27 20 1 60	15 56 19 4 94	22 59 15 96	8 44 16 68	4 2	3 99 346 246 59 753
800	15/ 19 20/ 24 TOTAL -5/ -1 0/ 4 5/ 9 10/ 14	1	92	134	99 1 17 34 33	3 65 15 28 16	88 3 12 36 15	1 87 7 47 16	1 59 13 36 11	20 2 7 6	2	85 2 665 4 81 252 242	1000	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TUTAL -5/ -1		8 16 14 42	7 30 49 23 109	14 47 61 26 148	1 18 42 40 1 102 3	13 30 27 70 1	20 31 1 / 3 72 3	22 43 6 1 73	28 47 9 85 2	14 25 7 46 2	5	141 308 232 68 753
1000	15/ 19 20/ 24 TOTAL -5/ -1 1 4 5/ 9	1	124	25 140 4 15	3 88 2 15 25	5 64 1 15 15	66 2 25 22	1 71 17 33	60 25 28	15 1 6 12	3	84 2 665 11 129 219	1200	0/ 4 5/ 9 10/ 14 15/ 19 TOTAL -10/ -6		6 21 42 24 93	12 38 63 35 148	53 54 16 146	15 27 21 1 67	16 20 18 2 57	1 / 2 1 8 1 50	22 28 5	29 28 8	21 28 4	11	166 269 223 79 753
1200	10/ 14 15/ 19 20/ 24 TOTAL -10/ -6 -5/ -1	3 3 8	3 32	116	18 2 62 3	7 1 39 7	57 1 4	10 1 61 4	59	4 25 1	2	220 84 2 665 1 25		-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 TUTAL		6 33 52 34 125	1 22 46 72 25 166	5 24 41 54 3 127	2 16 29 15 3 65	8 18 17 13	6 14 12 8	27 23 2	3 34 21 3	6 15 25 2	,	35 183 247 221 65 753
	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 TOTAL	2 6 4	5 77 5 12	31 42	24	15 11 5 1	26 23 5	17 19 8	21 28 2	20	2	142 215 215 66 1	1400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		2 14 40 70 26	2 24 57 78 11	7 26 56 41 2	17 23 11	11 14 13 8	2 7 18 11 3	1 9 21 11	1 7 32 1 / 2	12 13 19	5	63 185 247 214 40
1400	-10/ -6 -5/ -1 0/ 4 '5/ 9 10/ 14 15/ 19	1 4 8 2	1 4 2 23 3 59 1 68	37	2 <u>1</u>	9 10 13 4	5 15 8 4	1 5 25 10 4	5 22 17 1	1 6 16	1	2 45 147 225 200 45	ALTITUDE ABV SFC (METERS) SEASON:	INTERVAL	00 09 R E	10	20 29	30 39 I V 6	56 40 49	50 59 H U F	60 69 1 1 0	70 79 1 1	59 80 89 1 Y 1 I M E	99	<b>*</b> )	753 TOTAL DBS 12 HR
ABV SFC (METERS)	20/ 24 TOTAL AIR TEMP INTERVAL (C) WINTER (DJF	09 1 REL	7 167 D 20	30	40 49		32 60 69	45 70 79 1 1		99	4)	665 TOTAL OBS		FREQUEN 1 60	61	F W!	3	4	ODE	9	HIN 8		-12 H IDTA 90	L		
	FREQUEN	1CY 0F	#EATH 3	IER (	CODE	) FDF	R WIN	ITER-	4 00- ATDT	rR L																
	47	157	31 4	22		3	243	3	90	3																

#### TABLE XII. - Continued

### (b) Spring

PERIOD:	JAN 1959-DEC	1968																	ELV	:	6 M	37	44N,	122	12 W
	INTERVAL C	E L 90 10 19 19	20	I V I 30 39	40 49	50 59	60 69	I 1 70 79			OO HR TOTAL D DBS			R E	10 19				50 59	M 1 60	D I 70 79	T Y 80	(		12 HK TOTAL OBS
0	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34	2 1	3 3 1	1 9 14 5	28 11 5	13 48 9 4	19 37 4	9 16	3	1 1	52 145 43 17 2	0	0/ 4 5/ 9 10/ 14 15/ 19 TOTAL		1 1		1 1 2	1 3 4	6 11 17	2	129	5 144 235 10 394	43 66 3 112		253 471 22 752
200	TOTAL 5/ 9 10/ 14 15/ 19 20/ 24	4 1 1	1 3 9 8	29 12 17 9	50 3 27 16	74 3 54 19 4	60 2 21 6	25 1 15 2	5	3 2 1	259 12 138 70 31	200	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1	2	2	15 5	1 11 18 13	13	125 13		28 25 1		309 389 51 2
400	25/ 29 TOTAL 5/ 9 10/ 14 15/ 19	1	1 7 14	5 43 2 17 17	56 4 25 19	80 21 29 6	29 ·15 18 3	18 5 7	5 2 7	3 2 1	259 52 111 60 30	400	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		2	6 6 1	3	24 8 25 21	43 25 27 33	1	4	292 7 126 56 1	54 61 16		752 13 382 253 89
600	20/ 24 25/ 29 TOTAL 0/ 4 5/ 9 10/ 14	2 3 2	1	5 50 5 20	57 9 17	58 3 28 12	36 22 11	12 9 8	9 7 2	3 1 1 2	259 3	600	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19		3 8	13 3 14 19	30 2 10 24 28	60 3 13 27 21		128	18 104	21	77 8 54 12	4	752 62 367 184 93
800	15/ 19 20/ 24 25/ 29 TOTAL 0/ 4	6 3 1 12	15 12 1	16 14 2 57	8 7 41 1	46	3 36 5	17	9	3 1	51 36 4 259 15	800	20/ 24 25/ 29 TOTAL -5/ -1 0/ 4		13	18 54	14 1 79 3	8 72 4	3 82 6	20	145	31	74 1 12	4	45 1 752 1 109
	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	10 6 1	14 19 12 1	9 17 17 9	17 19 5 3	23 7 3	16 7	10	2	2	86 72 54 30 2		5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		1 5 13 2	9 18 32 15	16 38 33 14	32 57 28 3	38 47 7	60 25 1	4 <del>9</del> 8	7	2 <b>8</b> 4	2	284 209 114 34
1000	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	19 11 11 21 9	7 18 21 7	53 2 11 16 12 4	45 4 16 7 3	38 12 11 5	28 10 13 2	13 5 9 2	11 4 5	3 5 3 1	259 42 76 62 57 21	1000	TOTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		5 23 28	75 3 23 52 54	7 31 57 49	7 31 24 13	98 1 17 34 16 3	23 19 10	89 2 26 24 4	87 36 30 2	45 2 23 25 3	3 3	752 8 145 225 191 147
1200	25/ 29 TOTAL -5/ -1 0/ 4 5/ 9	42 1	1 54 1 18	45 7 12	31 1 8 13 7	28 1 16 5	25 12 6	16 1 9 5	9 1 6	9 3 3	1 259 3 57 69 59	1200	20/ 24 25/ 29 TOTAL -5/ -1 0/ 4 5/ 9		11 67	15 2 149 3 32	7 151 16 37	76 1 17 34	71 2 24 28	52 5 23	56 5 36	71 5 25 21	53 6 21	6	34 2 752 24 166 211
1400	10/ 14 15/ 19 20/ 24 TOTAL -5/ -1 0/ 4	28 6 52	17 20 3 59 1	14 11 2 46 1	30 1 12	24 4 9	1 19 1 10	15 2 6	7 1 3	7 2	60 11 259 11		10/ 14 15/ 19 20/ 24 25/ 29		38 32 8	58 58 7 2	65 34 4	22 6	11	23	11 3	53	36	2	200 130 19 2 752
	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL	10 26 29 4 69	19 22 16 1	12 8 7 37	9 5 1 28	1 18	3 1	13	3	5	70 63 53 5	1400	-5/ -1 0/ 4 5/ 9 10/ 14 15/ 19		3 30 58 30	1 13 39 72 50	17 55 58 22	19 30 21	6 25 14 2	8 21 14 4	15 18 6	21 9	9 21 8	1	58 159 205 216 106
ABV SFC (METERS)	AIR TEMP OF	10	20 29	30 39	40 49	50 59	60 69 I D	70 79 I T	80 89 Y	90 100 99 (%) (GMT):	TOTAL OBS	ALTITUDE ABV SFC	20/ 24 TUTAL AIR TEMP INTERVAL	00 09	5  26  10  19	20 20 29	1 157 30 39	79 40 49	47 50 59	47 60 69	39 70 79	40 80 89	99		8 752 Total Dbs
	FREQUENCY 1 2	OF WE		R (CI	DE)	FOR 9	SPR I	NG-	00 HF	l		(METERS) SEASON:	SPRING (MAM	)			VE			I D		TIME			L2 HR
	26 610	25	12	0			139		920	)			FREQUEN 1	CY D1	. WE		R (C)	UDE)	FOR 9	SPR B		12 H			
													50	100	15	61	2		3	140		92	٥		

#### TABLE XII. - Continued

PERIODI	JAN 1959-	eC 1	1968																ELV:	: 6	. м	37 4	4N)	122	12 W
		R	E L ) 10 ) 19	20				1 D 60 69		· Y	(GMT): (%) 90 100 99	TOTAL	SEASON: ALTITUDE ABV SFC (METERS)	SUMMER (JJA E AIR TEMP INTERVAL (C)	R E L 00 10	20	I V E 30 39	40 49	1 U A 50 59	1 I D 60 69	1 1			6)	12 HR TOTAL OBS
0	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 35/ 39	! !		1 1 1	4 5 1	4 12 17	16 40 3	39 37 1	36 3	6	1	5 101 96 27 2	200	10/ 14 15/ 19 20/ 24 TOTAL 5/ 9 10/ 14					2		118 2	554 2	17 132 1		553 260 1 814
200	TDTAL 10/ 14 15/ 19 20/ 24			1 4	10 3 14	33 1 25 25	59 5 48 10	77 13 30 2	43 15 9	6 2 2	1	232 37 118 55		15/ 19 20/ 24 25/ 29 TOTAL				2 6 1 9	1 11 23	15 59 6 80	91 81 2	341 56 399	9	2	553 218 37 1 814
400	25/ 25 30/ 34 TOTAL 5/ 5 10/ 14	!	1	2 1 8	11 28	7 58 4	63	45 13	24	4 1 5	1	20 2 232 1 39	400	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		1 3 1		5 29 47 7	16 91 43	3 H 6 1 5	6	19 143 18	26 90 1	1	53 367 251 119 23
	15/ 19 20/ 24 25/ 29 30/ 34 TOTAL		1 2 3	3 7 20 1 31	16 43 13	28 16 48	16 5	14 1 28	15	2	1	83 72 34 3 232	600	30/ 34 TOTAL 5/ 9 10/ 14 15/ 19	5	5	36 6 18	88 2 7 38	150 1 26 44	105 2 38	11 85	28 84	117 30 46	2	1 814 74 297
600	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		2 9 21	9 26 28	1 12 27	14	7 5 4	9 8 2	9 2	1 4 1	î	5 34 53 77 56	800	20/ 24 25/ 29 30/ 34 TDTAL	9 19 5 41	32 39 1	69 22 1 116	41 5 93	23 1 95	45 4 89	15 2		76		170 180 86 7 814
800	30/ 34 TDTAL 5/ 9 10/ 14		3 35	67	46 1 2	28 7	16 8	19	14	6	1	7 232 5 27	300	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	8 16 27	13 62 63	2 9 45 102 21	2 25 88 37 5	1 42 85 16	25 21 2	28 2 1	18	9		37 156 263 236 117
	15/ 19 20/ 24 25/ 29 30/ 34 TOTAL		19 24 3 50	12 42 27 2 84	11 23 2	10 1 27	5 2 15	3 7	7	2	1	46 95 54 5 232	1000	30/ 34 TOTAL 0/ 4 5/ 9 10/ 14	55 1 10	139	179 3 12	157 3 19	145 1	53 3 12	37 9 10	31 8 12	18 2 8 5	1	814 2 37 106
1000	5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		11 55 44	10 30 14	1 2 9 11 3	5 5 4	3	3 1	3	3	1	8 21 39 100 61		15/ 19 20/ 24 25/ 29 30/ 34 TOTAL	22 119 112 10	110 51 1	36 70 21	24 25 2	12	4	1				143 329 186 11
1200	30/ 34 TDTAL 0/ 4 5/ 9		112	1 59	26	14	7	4	6	3 1 3	1	3 232 2 8	1200	0/ 4 5/ 9 10/ 14 15/ 19	13 40	1 16 55	5 15 42	4 24 24	32 3 12 5	19 6 12 1	20 1 6 8	20 1 3 8	15 4 3	1	814 2 33 111 167
	10/ 14 15/ 19 20/ 24 25/ 29 TOTAL		17 64 37 119	16 32 12 64	11 7 23	3 3	3	3	3	4	1	20 47 106 49 232	1400	20/ 24 25/ 29 30/ 34 TDTAL 0/ 4	95 3	108 42 222	64	69	24	19	15	12	7 1	ı	355 143 3 814 3
1400	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		3 25 73	7 19 28	1 6 10 6	2 1 1 2	4	2	2 2	3	1	4 9 23 56 109		5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	20 75 1 177 67	26 75 105 28	5 25 38 54	4 15 20 11	6 9 4 4	12 1	3	3	3	1	34 116 213 352 96
	25/ 29 TOTAL AIR TEMP INTERVAL	00 09	26 127 10	5 59 20 29	23 30 39	6 40 49	5 50 59		5 70	4 80	1 90 100	31 232	ALTITUDE ABV SFC	TOTAL AIR TEMP INTERVAL	1 339 00 10 09 19	239 20 29	123 30 39	50 40 49	23 50 59	16 60 69	6 70 79	9 80 89	99		814 TOTAL OBS
(METERS)		R	EL					69 I D			(%) (GHT):		(METERS) SEASON®	SUMMER (JJA						ID		TIME	(% (GMT		12 HR
	FREQUE 1	NC Y 2			R (C)	DDE)	FOR 9	SUMI B		00 H				FREQUEN 1 22	2	EATH 3 7 7	4	ODE)	FOR 9	. SUM B 17		12 H TOTA 92	L		
	2	683	1	21	9		2	13		920	0				-				•	- '			-		

TABLE XII. - Concluded

### (d) Fall

SEASON: ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL	R E		20				60 69	I T		(GMT): (%) 90 100 99	TOTAL	SEASON: ALTITUDE ABV SFC (METERS)	FALL (SDN AIR TEMP INTERVAL (C)	R E			30	40	1 U N 50 59	1 I 60 69	70	7 Y 80	(	* )	12 H TOTA DBS
o	10/ 14 15/ 19 20/ 24 25/ 29 30/ 34 35/ 39		1 5 3 2	3 3 15 11	3 6 21 16 8	7 16 31 13	9 36 54 4	10 61 47 1	15 57 14	7 13	1	52 193 175 52 21	0	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		1	1 2 2	1 4	1 4 3	2 5 7 4	14 23 14	65	54 242 106	27 116 37	1	12 46 20
200	TOTAL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		11 2 3 6 1	33 3 21 23	15	67 1 17 29 29	103 24 57 20	119 1 37 56 4	86 23 21	20 11 8	1	494 2 125 202 114 40	200	TOTAL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		2 1 4	5 1 9 13 2	5 8 12 11 2	8 7 8 19 10	18 5 19 20 6	31 41 5	18 116 66 1	210 47	7 65 15	2	80 6 45 23 4
400	30/ 34 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		2 14 2 2 7 4	8 55 3 13 39 41	1 86 3 12 31 34 6	77 3 13 37 19	101 5 35 41 6	98 1 41 29 2	44 1 29 6	19 1 19 2	1	11 494 14 155 161 107 51	400	TUTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		5 1 1 7 4	25 1 3 18 23 3	36 7 8 17 33 6	45 7 17 29 27	50 1 5 32 43 15	12 46 52 6	25	28 130 16	87 1 11 63 5	1	80 38 38 21:
600	30/ 34 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		2	100 5 31 43 43	1 87 4 18 24 27	72 7 13 27 10	67 10 33 25 3	73 11 35 20 1	36 4 30 4	22 4 8 1	1 2 6	6 494 42 150 142 100 59	600	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		2 22 22 11	48 3 10 27 47 21	71 8 17 25 29	9 17 37 21	96 1 6 32 38 10	0 40 24 1	124 30 64 11	174 2 37 91 6	80 1 28 37 1	1	12° 310 193 130
800	30/ 34 TDTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24			122 2 15 34 65	1 79 10 20 26 13	57 4 25 32	71 12 23 17	67 1 16 23 6	38 1 9 18 1	13 7 7	8 7 2	1 494 2 68 135 138 106	800	TDTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29		57 1 9 26 38		85 3 11 28 48 40 2	85 1 12 26 59 11	87 1 11 48 53 4	71 1 1 7 5 3 2 2 1	106 2 20 27 4	138 3 40 27 1	67 2 21 12 1	1	804 136 242 242 141
1000	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19		16 61 2 6 44	27 143 1 8 25 35	1 70 1 6 18 29	1 69 1 8 16 21	53 10 24 3	46 1 15 15	29 2 17 8	14 1 12 4	9 7 3	45 494 7 85 119 136	1000	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		83 : 1 22 43 80	108 2 14 30 53 66	132 3 12 32 47 37	109 13 32 42 14	117 1 11 32 11 3	94 1 16 12 4	53 6 18 22 1	71 4 35 11 1	36 5 26 11	1	25 804 23 147 204 202 200
1200	20/ 24 25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	1	44 13 09 1 3 15 56	68 8 145 10 29 43	10 65 4 10 22 30	1 48 1 14 19 8	38 14 15 3	34 3 7 15 2	28 4 16 4	17 3 7 4	10 1 6	124 23 494 18 87 123 143	1200	25/ 29 TOTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24	1	1 6 26		2 133 4 14 34 50 25	102 2 12 38 29 8	58 1 4 19 24 6	33 4 21 19 3	47 9 18 14 1	51 9 19 8 1	42 4 14 4	2	26 804 41 140 206 229
1400	25/ 29 TOTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	1	2 35 2 5 71 52 2	137 3	72 4 12 20 24 6	45 12 13 4 2	32 2 8 8 1	27 1 3 8 10 1	1 1 11 4	6 11 2	7 3 6	6 494 2 26 99 117 155 92	1400	25/ 29 TOTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29	1	5 77 2 2 10 42 82	7 18 37 98 54		89 3 12 36 16 4	54 1 7 19 16 6	47 5 22 10 1	4 2 7 14 8	37 1 8 11 6	22 1 6 14 3	1 2	804 7 51 143 203 259 136
	TOTAL  AIR TEMP INTERVAL  (C)	00 09 R E	61 1 10 19	20 29	30 39	40 49	50 59	60	70 79 I T	89 Y	9 90 100 99 (%) (GMT):	085	ALTITUDE ABV SFC (METERS) SEASON: F	TOTAL  AIR TEMP INTERVAL  (C)	00 09 R E I	10	20 29	30 39	71 40 49 H		38 60 69 I D			99 (1	()	804 TOTAL OBS 12 HR
	FREQUENC	Y 0F	WE/	ATHER		DE 1	FOR	FALL		O HR				FREQUENC	Y OF	WE A	THE		DDE )	FOR	FALI B		12 H8			

# TABLE XIII. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR TATOOSH ISLAND, WASHINGTON

	WINTER (DJF AIR TEMP INTERVAL (C)	R E					50 59	60 69	I 1 70 79	Y		% )	OO HR TOTAL OBS	SEASON1 P ALTITUDE ABV SFC (METERS)	INTER (D AIR TEM INTERVA (C)	PR	0 1	0		7 30 39			60 69		ΤY		T); %) 100	TOT
0	-5/ -1 0/ 4			1	1		1	1	1 15	7	3		3 34	0	-5/ - 0/	1					2	3	1	11	22	14		
	5/ 9 10/ 14			2	1	1	7	27	51	43	20		152 24		5/ 10/ 1	9							2		50	37	1	1
200	TOTAL -10/ -6			3	2	1	13	31	73	61	29		213		TOTAL						2	3	٤	34	75	55	1	1
200	-5/ -1				1	1	1	3	2				7	200	-5/ - 0/	1				1	2	1 2	5	2 26	1 36	7		
	0/ 4 5/ 9			2	2	3	5	19 24	30 40	10 34	3 15		74 122			9			1	•	-	ã	5	25	36	16		
	10/ 14				ī		2	1	2	2	1		9		TOTAL				1	2	z	7	11	53	74	24		1
400	TDTAL -10/ -6			3	5	5 1	14	47	74	46	19		213	400	-5/ <b>-</b>					1	1	3	1	1 44	3 36	15		1
	-5/ -1 0/ 4			1	2	2	2	5 32	5 38	1 18	9		16		5/	9			1	1	i	1	ذ	14	21	12		1
	5/ 9		1	1		1	3	8	29	25	10		113 78		10/ 1- TUTAL				1	1 3	5	6	13	59	60	27		1
	10/ 14 TOTAL		1	2	2	10	14	46	72	1 45	19		213	600	-10/ -1 -5/ -						1	5	2	12	1			-
600	-10/ -6 -5/ -1			1	1	3	1 2	1					2		0/	4			1		4	2	11	34	38	20		1
	0/ 4				i	10	7	12	12 45	5 36	11	1	37 129		5/ °				2	1	1	1	Э	6	8	9		
	5/ 9 10/ 14		1	1 2		2	1	6	8	13	8		40	800	TOTAL -10/ -6				4	1	6	8	16	52	54 1	33		1
	15/ 19 TOTAL		1	1	2	15		37	-	٠.			1	000	-5/ -	i					3	5	6	23	15	7		
800	-15/-11		1	,	2	10	12	31	66	54	20	1	213 1		5/ 9				2	1	2	2	11	23	35 7	20	1	
	~10/ -6 -5/ -1			2		1	1	1 16	1 19	17	5		64		10/ 14 TUTAL	•			2	1								
	0/ 4 5/ 9		1	2	4	7	13	14	28	31	14	1	115	1000	-10/ -6				4	2	8 1	8	18	46 1	5 B 2	29	1	1
	10/ 14		1	2	1	2	2	5	6	5	3		24 5		-5/ -1 0/ 4				2	1 2	4	11	11	23	27 21	13 16	1	
000	TOTAL ~15/-11		3	6	5	12	21	36	54	53	22	1	213		10/ 14	•				3		•	ì		٤	1	-	
	-10/ -6 -5/ -1			1	1	1	1	2	1	3			10		TOTAL				5	6	9	15	17	36	53	30	3	1
	0/ 4		2	5	6	6 7	7 5	11	27 19	25 22	11	1	89 92	1200	-10/ -6					1 5	111	10	ا د 1	4 15	5 30	1 9	2	
	5/ 9 10/ 14		1	1		4	2	ı	3	3	ı		16		0/ 4	,			3	3	5	2	B	11	12	10	ī	
200	TOTAL		4	10	9	19	15	26	50	53	26	1	213		5/ 9 10/ 14				2	2	1			2	Z			
200	-15/-11 -10/ -6				1	1	1 5	4	4	2	1		1 18	1400	70TAL -15/-11				7	11	18	12	2.2	32	49	20	3	1
	-5/ -1 0/ 4		2	1	6	ā 5	9	15	23	65	12	1	103	1.00	-10/ -6	•				i	3	2	4	5	9	3	1	
	5/ 9		3	2	1	2	2	8	15	13	9	1	73 15		-5/ <b>-</b> 1			1	2	6	12	8	10	18	17	13	1	
	10/ 14 Total		в	8	17	16	25	29	42	44	22	2	3 213		5/ 9 10/ 14			1	3	2	1	1			1		•	
•00	-15/-11 -10/ -6				3	1 2	1	5				٠	2		TOTAL			2	13	16	23	14	18	30	35	21	2	1
	-5/ -1		2	8	8	12	10	8	10	6 27	3 10	1	35 103	ALTITUDE	AIR TEMP	00	1	D	20	30	40	50	60	70	80	90	.00	тот
	0/ 4 5/ 9		5	3	10	5 1	5 2	4	10	8	6 2		56 15	ABV SFC (METERS)	INTERVAL				29	39 V E	49	59	69	79 1 T	89	99		ВB
	10/ 14 TOTAL			1	25				-				2	SEASON; W					•	٠.	- "	0 11			TIME			12
						21	24	18	38		51	1	213															
SFC	INTERVAL	09	19		39	40 49	50 59	69	70 79	8 Q 8 9	90	100	TOTAL OBS		FREQUE	NC Y Z		√ΕΑ 3		R (C	ODEI	FOR 9	W I N		12 H			
TERS) Son: W	(C) INTER (DJF)	RE						Ĭ D	ΙŢ	Υ	( )							-								-		
										1 M E	( GM I	,,,	00 HR		61	414	2	+9	В (	6		5	88		90	3		

#### 

#### TABLE XIII. - Continued

### (b) Spring

PERIODI	JAN 1956-0	EC 1	965																	۲L۷	: 3	1 M	48 7	23N,	124	44 W
		R	10	20	3(	40			70	7 Y 80	E (GMT) (%) 90 100 99	TOTAL	SEASONI ALTITUDE ABV SFC (METERS)	SPRING (MAN E AIR TEMP INTERVAL (C)	R į			I V I 30 39		50 59	M I 60 69		T Y 80	(	<b>%</b> )	12 HR TOTAL OBS
0	-5/ -1 0/ 4						2	1	1	2	1	1 6	0	-5/ -1 0/ 4							1	1	12	1 16		30
200	5/ 9 10/ 14 15/ 19 TOTAL -5/ -1			1		1 1 2 4	7 2	31 46 3 81	73	49 2	16 20 37 1	125 196 15 343	200	5/ 9 10/ 14 TOTAL -5/ -1 0/ 4						1 1 2	18 1 20	11 50	100 35 147	35	2	264 82 377 1 66
	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24				1 2 2	. 5 8 4	7 27 8 5	8 64 17 1		3 46 15	1 10 3	27 224 77 12 2	400	5/ 9 10/ 14 15/ 19 TOTAL -5/ -1				1 1 2	2 3 1 6	5 2 13	21 3 35 2	65 9 1	127 18	39 7 54		259 46 5 377 5
400	TOTAL -5/ -1 0/ 4 5/ 9				7	20 3 12	47 10 27	90 29 46	1 22 57		15 1 4 10	343 2 81 198	400	0/ 4 5/ 9 10/ 14 15/ 19			2	1 2 1	1 2 7 2	3 16 5	17 30 10	39 43 2 1	55	8 30 1	i	124 209 34 4
600	10/ 14 15/ 19 20/ 24 TDTAL -5/ -1			1	19 1	6 1 27	10 3 50 2	10 1 86 2	8 8 8 4	57 1	15	44 14 4 343 10	600	20/ 24 TUTAL -5/ -1 0/ 4 5/ 9			2	5	12 4 15	24 5 18	59 5 14 16	5 69 28	148 4 58 51	39 2 19 20	1	1 377 16 170 149
	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1	1 4 5 3	10 7 2 3		13 22 5 1	31 22 3	51 38 4 1	27 27 3	6	138 136 36 16 7	800	10/ 14 15/ 19 20/ 24 TUTAL -5/ -1		1	2 1 1 5	5 3 1 10	9 1 29 2	5 1 29 1	5 40 8	107	115 17	41		34 6 2 377 45
800	TOTAL -5/ -1 0/ 4 5/ 9 10/ 14		1	13 2 6	25 1 3 11 8	1	44 6 21 23 5	58 5 26 19 2	98 12 57 18	58 6 30 10	12 1 7 6	343 32 155 104 32		0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1	1 2	1 5 4 4	6 15 8 1	20 23 6 1	20 1 / 5	57 15 4	56 25	24 10		184 112 29 6
1000	15/ 19 20/ 24 TOTAL -10/ -6 -5/ -1		1	13	6 2 31	5	55	52 1 8	92	47 15	14	17 3 343 1 67	1000	TOTAL -10/ -6 -5/ -1 0/ 4 5/ 9		1	3 1 4	14 1 9 5	32 1 18 17	51 5 23 13	50 2 8 14 15	89 1 21 40 11	98 1 35 41 9	38 14 27 3		377 4 88 173 77
	0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 1 2	3 5 6	7 13 6 6	5 12 8 1	21 13 5	30 12 3	43	29	12	151 76 31 15	1200	10/ 14 15/ 19 TOTAL -10/ -6 -5/ -1		1	3 15	5 3 23	15 41 6	6 2 49 3	2 1 42 1 10	75 2 37	1 87 3 29	44 3 15		26 9 377 12 112
1200	TOTAL -10/ -6 -5/ -1 0/ 4		1	20 1 5	36 1 2 7	32 9 13	49 3 11 26	54 1 12 22	77 3 28 36	53 1 17 22	16 1 3 8	343 10 84 140		0/ 4 5/ 9 10/ 14 15/ 19		2	4 4 3 3	10 8 9	17 11 3	27 19 3 2	26 8 3	31 6	28 4	18		112 161 65 21 6
	5/ 9 10/ 14 15/ 19 20/ 24 TOTAL		2 1 4	4 3 2 15	13 8 7 1 39	10 9 41	9 5 54	12 2	12 79	44	1	67 28 13 1 343	1400	TOTAL -10/ -6 -5/ -1 0/ 4 5/ 9		3 1 2 2 4	15 3 8 5	31 5 14 11	6 23	64 17 22 17	48 3 21 18 6	76 9 26 22 3	64 9 29 16 2	39 6 20 13 3	1	33 129 138 61
1400	-10/ -6 -5/ -1 0/ 4 5/ 9 10/ 14		2 1 2 3	1 7 7 6	2 7 10 13 5	1 12 19 11 5	11 16 13	19 20 6	8 31 20 9	25 13 1	2 5 7 1	22 113 113 63 23	ALTITUDE	10/ 14 15/ 19 TOTAL AIR TEMP	00	1 10 10	2 1 19 20	4 1 35 30	1 40 40	4 64 50	1 50 60	60 70	56 80	42 90 1	ו סט דו	12 4 377 OTAL
	15/ 19 TOTAL		10	22	43	48	48	47	68	42	15	9 343	ABV SFC (METERS)		09 R E		29	39	49	59	69	79 I T	89 Y	99 (%	, 1	DBS
ABV SFC (METERS)	AIR TEMP INTERVAL (C) SPRING (MAM		10 19 L A		30 39 V E	40 49 H	50 59 U M				90 100 99 (%) (GMT):	OBS	2 Inucase	FREQUENC 1		. WE 4	THE		10E)	FOR 9	SPR B	ING-:	-	₹	, . 1.	⊾ mĸ
	FREQUEN	C Y C	F WE		R (0	ODE)	FOR 9	SPR B		00 HI TOTAI				69 3	329	138	20:	2		7	1/5		920	)		

#### TABLE XIII. - Continued

PERIOD:	IAN 1956-DE	C 19	65																	1	LV:	ا د	м 4	48 2	3N, 1	24 4	14 W
SEASONI S ALTITUDE ABV SFC (METERS)	SUMMER (JJA AIR TEMP INTERVAL (C)	R E	L A 10 19		V E 30 39	н 40 49	U M 50 59	1 D 60 69			( )	61	OO HR TOTAL OBS	SEASONI S ALTITUDE ABV SFC (METERS)	UMMER (JJA AIR TEMP INTERVAL (C)	R E L	0	† I 20 29	30	н 40 49	U M 50 59				(GHT (% 90 1 99	) 1	TOTAL
0	10/ 14 15/ 19					1	2	3 12		115 126	86 13	8	256 225 7	0	5/ 9 10/ 14							2	7	85 9	12 333 6	3 4 2	16 461 17
200	20/ 24 TUTAL 5/ 9 10/ 14 15/ 19 20/ 24				1	2 6 5	3 9 1 17 15 3	1	110 5 134 26	4	99 33	9	488 11 382 80 10	200	15/ 19 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24				1		2 4 2	2 10 6	18	95 31 154 6	351 27 166 3	39	494 71 379 37 7
400	25/ 79 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24			1	3 4 2 10	1 14 1 6 10	36 11 16 24	12	165 20 115 22	171 18 94 2	33 3 25	1	5 488 66 314 76 26	400	TUTAL 5/ 9 10/ 14 15/ 19 20/ 24 25/ 29				2	2 3 7 1	8 1 8 14 5	22 5 20 1 / 4	31 57 9	106	62 81 1		155 274 45 18 2
600	25/ 29 TOTAL 5/ 9 10/ 14 15/ 19 20/ 24		2	3 4 3 7	2 14 1 3 12 10	1 28 11 20 6	55 16 22 14	87 26 54 17	157 48 78 5	114 39 58 2	28 5 12	1	488 136 240 73 29	600	TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24			2	3 1 2 8 4	13 2 5 10 10	28 1 15 11 5	20 21 13 2	97 1 38 49 7	94 57 1	75 34		494 1 231 183 50 24
800	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		3 2 1 3	8 18 2 9	1 27 4 5 15	1 38 1 6 15 18	57 14 37 23	97 46 51 12	131 60 50	99 4 37 34	17 9 3	1	10 488 5 177 197 72 31	800	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24			3 5	17 17 17 12	27 4 12 9	32 1 7 18 13 2	56 2 22 36 12	96 3 58 47 1	152 7 89 32	109 2 65 9	1	5 494 15 247 161 47 21
1000	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		6 3 2 6	4 15 3 7 9	2 38 1 3 10 14	46 5 29 26	75 2 21 35 18	109 3 45 33 3	111 3 64 28	75 8 40 20	12 13 2	1	488 18 194 167 73	1000	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 2	2 6 1 5 4 8	1 29 1 3 16 10 7	30 1 5 10 14 2	41 18 24 14 4	74 4 22 41 1	109 10 46 30	128 25 77 14	76 10 59 4	1	3 494 51 232 146 43 21
1200	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		11 1 5 6 3	4 29 5 5 8 8	1 43 1 3 25 20 11	64 2 8 37 18	77 2 32 32 32 6	84 7 59 32 2	95 7 50 18	69 15 34 10	15 2 8 1	1	5 488 36 200 165 61 25	1200	25/ 29 TOTAL 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		1 1 1	1 19 4 2 6 5	37 2 5 19 6 8	32 11 19 12 1	60 3 24 29 11	68 7 45 28 3	86 17 46 20	116 46 49 5	73 16 37 4		1 494 91 222 127 39 14
1400	25/ 29 TOTAL -5/ -1 0/ 4 5/ 9 10/ 14 15/ 19 20/ 24		15 4 6 7 3	1 27 5 15 10 8 38	60 4 10 27 19 3 63	66 3 26 38 10 2	74 7 27 23 5 1 63	100 19 42 23 3	76 20 44 11	59 3 15 27 4	11 5 8 1		1 488 3 73 193 148 54 17	1400	25/ 29 TOTAL -5/ -1 O/ 4 5/ 9 10/ 14 15/ 19 20/ 24		3 1 3 1 6	1B 2 9 8 1 29	40 1 14 22 7 5	43 20 24 7 1	67 8 20 28 8	83 10 38 21 1	83 32 40 7	100 2 48 33 2	57 1 28 22 5	1	494 3 132 198 121 32 8
ABV SFC (METERS)	AIR TEMP INTERVAL (C) SUMMER (JJ	09 R E	10 19 E L 4	20	30 39	40 49	50 59	60 69	70 79	80 89 T Y	90 99	% )	TOTAL OBS	ALTITUDE ABV SFC (METERS) SEASONI		09 R E	10 19 L A	20 29	30 39	40 49	50 59 I U M	60 69	70 79	80 89 F Y	90 99 (	<b>%</b> )	TOTAL OBS
	FREQUE	NCY (	DF W8		R (0	ODE	) FOF	s Su	MER	-00 H	HR AL				FREQUE!	NCY DF	WE 3		R (C	DDE)	FOR 9	SUM B		-12 H			
	-	309	59		1			17	7		20				120	221	77	35	6		В	138		9;	20		

#### TABLE XIII. - Concluded

### (d) Fall

PERIOD: JAN 1956-DEC 1965	ELV: 31 M 48 23N, 124 44 W
SEASONI FALL (SON) ALTITUDE AIR TEMP RE L A T I V E H U M I D I T Y (%1) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 DBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99	SEASON1 FALL (SON) ALTITUDE AIR TEMP R E L A T I V E H U M I D I T Y (%) TOTAL ABV SFC INTERVAL 00 10 20 30 40 50 60 70 80 90 100 BBS (METERS) (C) 09 19 29 39 49 59 69 79 89 99
0 0/4 1 1 1 1 3 5/9 2 5 6 15 16 5 49 10/14 3 11 38 85 59 4 200 15/19 1 4 7 21 24 6 63 20/24 2 2 70741 3 15 25 75 125 70 4 317	0 0/4 1 3 1 1 6 5/9 1 17 31 48 11 108 10/14 2 1 11 43 87 13 157 15/19 1 2 2 5 10 TOTAL 2 4 33 77 141 24 281 200 0/4 2 3 3 5 1 14
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ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 07 19 29 39 49 59 69 79 89 99 DBS (METERS) (C) R E L A T I V E H U H I D I T Y (%) SEASON: FALL (SON)	ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 085 (METERS) (C) RELATIVE HUMIDITY (%) SEASONI FALL (SON) TIME (GMT)1 12 HR
FREQUENCY OF WEATHER (CODE) FOR FALLOO HR 1 2 3 4 9 8 TOTAL	FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR 1 2 3 4 9 B TOTAL
32 421 136 164 4 153 910	49 421 150 165 8 116 909

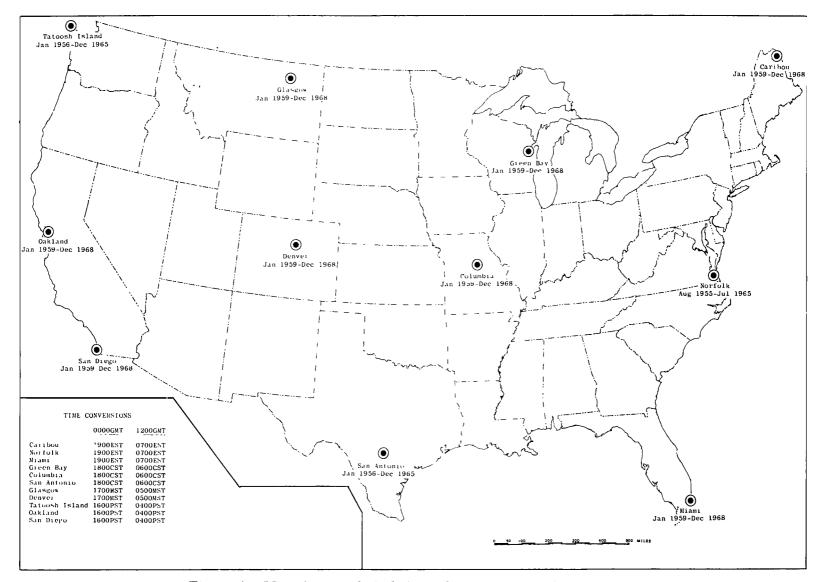


Figure 1.- Map showing distribution of sites selected for analysis.

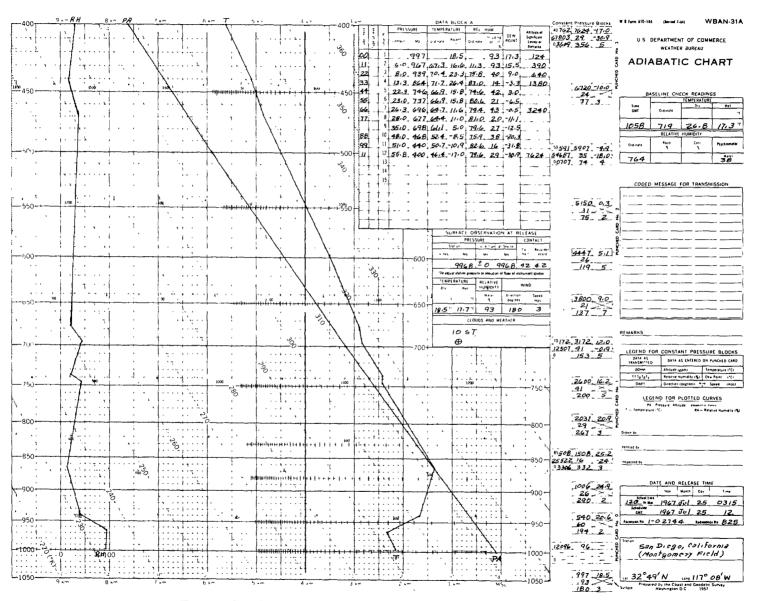


Figure 2. - A typical sounding plotted on form WBAN-31A.

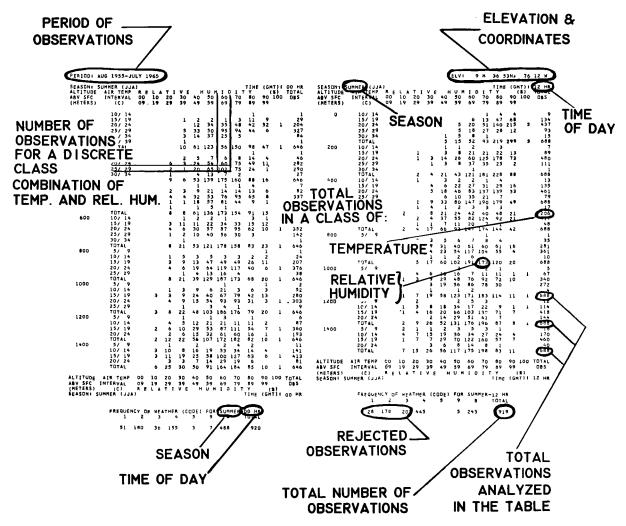


Figure 3.- Example table from the set of 44, showing distribution of temperature and relative humidity by location, time of observation, and altitude compared with the total number of observations. Codes for selection or rejection are described in the body of the text.

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